DOCUMENT RESUME

ED 396 581 FL 023 947

AUTHOR August, Diane; Pease-Alvarez, Lucinda
TITLE Attributes of Effective Programs and Classrooms Serving English Language Learners.
INSTITUTION National Center for Research on Cultural Diversity and Second Language Learning, Santa Cruz, CA.
SPONS AGENCY Office of Educational Research and Improvement (ED), Washington, DC.
PUB DATE 96
CONTRACT R117G10022
NOTE 60p.
AVAILABLE FROM Dissemination Coordinator, NCRCDSLL, 1118 22nd Street N.W., Washington, DC 20037.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS *Change Strategies; Classroom Techniques; *Educational Change; Educational Improvement; Elementary Secondary Education; *English (Second Language); Instructional Effectiveness; Language Role; Models; Program Design; *Program Effectiveness; Second Language Instruction

ABSTRACT

The analysis presented here attempts to specify the various conditions, including school-wide and classroom practices, that maximize English language learners' opportunities to meet challenging outcome expectations, and synthesize them into a model for change at the levels of school and classroom. The attributes of effective programs identified here are based on theory, research, and experience, including a review of literature, case studies of exemplary teachers, and the knowledge of expert practitioners. Introductory sections give an overview of methodological and implementation issues and of a number of issues concerning language minority children: need for school change, second language learner characteristics, the place of native language use, equity, and systemic reform. The school change model is then outlined, specifying desired features of: (1) school-wide culture, policy, and practice (organization, home/school/community partnerships, curriculum design, student assessment, staff knowledge base and development, and program evaluation), and (2) classroom practice (creation of learning environment, instructional design and delivery, framework for instruction, opportunities for extended dialogue). These features are then discussed further, drawing on examples from current practice in exemplary schools. Contains a substantial bibliography. (MSE)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 396 581

ATTRIBUTES OF EFFECTIVE PROGRAMS AND CLASSROOMS SERVING ENGLISH LANGUAGE LEARNERS

DIANE AUGUST AND LUCINDA PEASE-ALVAREZ

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

THE NATIONAL CENTER FOR RESEARCH ON CULTURAL DIVERSITY AND SECOND LANGUAGE LEARNING

FL023947

BEST COPY AVAILABLE

Attributes of Effective Programs and Classrooms Serving English Language Learners

DIANE AUGUST
NATIONAL RESEARCH COUNCIL
BOARD ON CHILDREN, YOUTH, AND FAMILIES
WASHINGTON, DC

LUCINDA PEASE-ALVAREZ
BOARD OF STUDIES IN EDUCATION
UNIVERSITY OF CALIFORNIA, SANTA CRUZ

NATIONAL CENTER FOR RESEARCH ON CULTURAL DIVERSITY AND
SECOND LANGUAGE LEARNING

1996

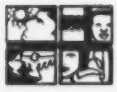
Attributes of Effective Programs and Classrooms Serving English Language Learners

Editorial/production supervision: Jeanne Rennie

Production: Guadalupe Hernández-Silva

Cover and interior design: Drews & Row, Inc.

This report was prepared with funding from the Office of Educational Research and Improvement (OERI) of the U.S. Department of Education, under Cooperative Agreement No. R117G10022. The findings and opinions expressed here are those of the authors and do not necessarily reflect the positions or policies of OERI.



© 1996 by the National Center for Research on Cultural Diversity and Second Language Learning, University of California, Santa Cruz

All inquiries should be addressed to Dissemination Coordinator, NCRCDSLL/CAL, 1118 22nd Street NW, Washington, DC 20037.

National Center for Research on Cultural Diversity and Second Language Learning

The National Center for Research on Cultural Diversity and Second Language Learning is funded by the Office of Educational Research and Improvement of the U.S. Department of Education to conduct research on the education of language minority students in the United States. The Center is operated by the University of California, Santa Cruz, through the University of California's statewide Linguistic Minority Research Project, in collaboration with a number of other institutions nationwide.

The Center is committed to promoting the intellectual development, literacy, and thoughtful citizenship of language minority students and to increasing appreciation of the cultural and linguistic diversity of the American people. Center researchers from a variety of disciplines are conducting studies across the country with participants from a wide range of language minority groups in pre-kindergarten through Grade 12 classrooms. Research projects deal with the relationship between first and second language learning; the relationship between cultural and linguistic factors in the achievement of literacy; teaching strategies to help children from diverse linguistic and cultural backgrounds gain access to content material; alternate models of assessment for language minority students; various instructional models for language minority children; and the effect of modifications in the social organization of schools on the academic performance of students from diverse backgrounds.

Dissemination is a key feature of Center activities. Information on Center research is published in two series of reports. *Research Reports* describe ongoing research or present the results of completed research projects. They are written primarily for researchers studying various aspects of the education of language minority students. *Educational Practice Reports* discuss research findings and their practical application in classroom settings. They are designed primarily for teachers, administrators, and policy makers responsible for the education of students from diverse linguistic and cultural backgrounds.

For more information about individual research projects or to have your name added to the mailing list, please contact:

Barry McLaughlin, Director
National Center for Research on Cultural Diversity
and Second Language Learning
Social Sciences II
1156 High Street
University of California
Santa Cruz, CA 95064

COLLABORATING INSTITUTIONS

University of California
Santa Cruz

University of California
Irvine

University of California
Los Angeles

University of California
San Diego

University of California
Santa Barbara

University of Arizona
Tucson

University of Southern California
Los Angeles

Center for Applied Linguistics
Washington, DC

Technical Education Research Center
Cambridge, MA

Acknowledgment

The authors gratefully acknowledge funding for this work from the Arco Foundation and the Office of Educational Research and Improvement, U.S. Department of Education. However, the views and statements expressed in this report are those of the authors and not the sponsors.

Overview

While local approaches to school improvement are not new, they have not been the focus of reform efforts that address the special needs and strengths of English language learners.[1] Indeed, these students have generally been bypassed in recent school reform and restructuring efforts (Olsen et al., 1994). This paper is an attempt to specify the various conditions, including school-wide and classroom practices, that maximize English language learners' opportunities to meet challenging outcome expectations. These conditions or attributes are coupled with exemplars that provide concrete examples of effective practice. Practitioners can use the attributes and exemplars as benchmarks with which to compare their programs and practices and make improvements as they find necessary. This model for school change has been used successfully in a variety of settings and is recommended as an alternative to top-down methods for altering school performance.[2]

DEVELOPMENT OF A MODEL FOR SCHOOL CHANGE

This paper attempts to describe the various conditions and practices that maximize English language learners' opportunities to meet challenging outcome expectations. The model for school change that we are proposing has as its focal points the school and the classroom; it does not directly address or seek to change district, state, or federal policies. Clearly, policies made at these other levels are very important and have a great deal to do with how well schools and classrooms function. We choose to focus on the school, however, because this is ultimately where reform must take place if children are to succeed.

The attributes of effective programs and classrooms identified in our model are based on theory, research, and experiential knowledge. A comprehensive review of the literature on effective schooling in general and effective schooling for language minority and second language learners in particular provided some of the attributes. Findings from case study research focusing on the pedagogical perspectives and classroom practices of exemplary classroom teachers who serve a multilingual and multicultural student population provided another important basis for the model. Most notably, this research provided exemplars of the attributes described. The research was conducted by Lucinda Pease-Alvarez and Barry McLaughlin, investigators at the National Center for Research on Cultural Diversity and Second Language Learning. Criteria used to select participating teachers included peer nominations, classroom visits, and preliminary interviews. The teachers selected for study worked in elementary and middle schools in California, New York, Virginia, Oregon, and Illinois.

Finally, the experience and knowledge of expert practitioners, who served in an advisory capacity to the project, contributed to our model. The following individuals made up this advisory committee: Craig Baker, Jennifer Samson, Jennifer Galeria, Graciela Italiano, Ellen Moir, Kenji Hakuta, and Delia Pompa.

METHODOLOGICAL AND IMPLEMENTATION ISSUES

Selecting attributes associated with effective schooling for English language learners has been difficult. To begin with, very few effective schools studies identify English language learners in their target population. Malave (1988) reviewed over 150 papers on effective schools and effective instructional practices. She found that "a limited number of effective schools studies identify the target (LEP) students in their sample population. It also demonstrated that the majority of them make no analysis of their findings regarding the identified variables and their relationship to the academic performance of the population" (pp. 39-40). A major problem with the few studies that do take English language learners into account is the paucity of empirical evidence they provide to show that specific attributes improve student performance. Some studies report practitioners' "best guesses" about what works, while others explore practices found in schools or programs that have been nominated as effective. There is very little outcome data to corroborate effectiveness. Other studies, although more experimental in nature, have methodological flaws. They do not control for rater bias, rarely describe the educational significance of the findings (that is, statistical rather than educational significance is reported), or rely on standard forms of assessment, such as norm-referenced achievement tests, which may not measure what students are actually learning in school.[3] These problems also characterize the original effective schools research that resulted in the identification of so-called effective schools, which, when scrutinized more carefully, were not so effective. In some schools identified as effective, there were a number of students with low achievement levels. And in some schools that lacked effective attributes, there were students performing as well as or better than students in the so-called effective schools.

The difficulty of determining effectiveness may stem in part from the vagueness of the effectiveness criteria found in many studies. For example, in one school reviewed, "an accepting, safe, and supportive school environment" meant strict discipline policies and an emphasis on good citizenship skills, while in another school

this attribute was defined as "encouraging students to value their culture and language in both curricular and extracurricular activities" (Pierce, 1991, p. 32). Another problem with some of the attributes of effectiveness is that they are difficult to detect, let alone assess. Student engagement, mentioned frequently in the literature as an important attribute, is an example. A student may look as if he or she is daydreaming, but may in fact be thinking intensely. Conversely, students who appear to be engaged in an activity may be paying no attention whatsoever.

Another difficulty in identifying effective attributes is that effectiveness may be in the eye of the beholder; real effectiveness variables may elude the observer or reviewer. This is probably due in part to our predilection to look for what we instinctively feel makes a difference, and in part to our inclination to assume that what is most salient is also most important. In addition, there may very well be an interaction between effective strategies and the individuals or groups of individuals for whom these strategies are intended. In some instances, an effective program for fluent English-speaking students may not benefit English language learners. For example, small class size may help students who understand what is going on, but not students with rudimentary English skills. Cooperative learning may work well with students from some cultures, but not others. Finally, adopting an approach that involves implementing a list of specific attributes may be missing the boat. Any one set of factors may work in one place and not in another because of differences in the context.

The authors also found school improvement instruments to be problematic for a variety of reasons. First, many of the instruments are based on models of effective teaching and learning that have not been validated with language minority students and thus ignore some important factors, such as cultural relevance and language background. These measures fail to identify programmatic features that are known to be important in promoting second language learning. Second, many depend on self-report data alone and do not provide for other data collection procedures such as the use of records and observations. Third, some are not designed to summarize information systematically and put the findings in a format that can be used by practitioners for program improvement. Finally, few of the systems collect outcome data or provide clear instructions on how the data can be analyzed to yield important information regarding the link between program quality and student outcomes.

Given the serious shortcomings of the literature on effective schooling and of various assessment systems, and given the problems associated with choosing criteria of effectiveness, the authors would like to emphasize from the outset that the attributes of effective schools reported in this paper are working hypotheses that need to be tested for their validity. Furthermore, there are most certainly attributes that have been overlooked. However, this document is our best attempt to select the attributes most likely to matter. To achieve this goal, we have selected attributes that are supported by multiple sources of evidence, including their prevalence in schools that successfully educate English language learners and their validation by successful teachers. To avoid ambiguity, the selected criteria are clearly defined. In some instances, this entails further defining general concepts in the literature offered as attributes of effectiveness. For example, Stedman (1987) considers "personal attention" an important variable. An indicator of personal attention is the presence of ongoing monitoring of students' academic performance. For our purposes, then, the ongoing monitoring becomes the attribute of effectiveness.

Finally, we are not of the mind that an "implementation of attributes" approach works. This model is intended to provide school staff with benchmarks they can use to begin to compare their practices with those considered exemplary—a model or vision of the possible. School staff will most certainly have to develop their own routes to effectiveness. As Carter and Chatfield (1986) hypothesize, "it has become increasingly clear that the efforts [at school change, school improvement] most likely to succeed will be those that involve key actors in the schools in serious, grounded analyses of the outcomes and related processes at their sites—and in conceptualization of innovations tailored to the concrete realities that they have together revealed" (p. 231). These findings are corroborated by Goldenberg and Sullivan (1994) in recent work in an elementary school in southern California. Their model suggests the need for

four elements for changes in teaching and learning to occur: "goals that are set and shared; indicators that measure success; assistance by capable others; and leadership that supports and pressures" (p. 4).

Next Steps

Our model provides school staff with attributes and exemplars of effective practice. The next step will be the development of a variety of methods—records, self-report, and observation—to collect information on how a current program is operating, so school staff can compare it with the criteria contained in the model. Once the data are collected and summarized, staff will have to decide what goals to set and how to accomplish their goals. In many cases, additional resources and staff development will be necessary. Staff will want to set priorities for what they hope to accomplish and establish a time line and procedures for accomplishing it, with ongoing evaluation of the process.

We hope that our model is broad enough to encompass very different kinds of programming and school contexts—that it will work equally well in schools composed predominately of one language group as well as in schools with multiple language groups.

ISSUES RELATED TO EDUCATING LANGUAGE MINORITY CHILDREN

Need for School Change

Demographic information about the increasing number of English language learners in the United States and their poor educational attainment has an important bearing on the need for the kind of school change model we propose. According to one estimate, there has been an increase of almost 1 million limited English proficient (LEP) students in Grades K-12 in U.S. public school districts in the last 10 years. Preliminary findings from the *National Descriptive Study of Services for Limited-English Proficient Students* (Fleischman & Zehler, 1993) indicate that there were 2.314 million LEP students in the 1991-92 school year in Grades K-12 in U.S. public school districts. This was an increase of almost 1 million students since their 1984 descriptive study, which used comparable procedures.

While numbers of English language learners increase, their performance remains low. For example, a recent Congressionally mandated study indicates that English language learners are greatly over-represented among the segment of the student population that scores below the 35th percentile on nationally normed achievement tests.[4] Moreover, preliminary data collected on a national sample of LEP students during the 1991-92 school year indicate that of 2.3 million school-aged children nationwide, approximately 200,000 LEP students were assigned to grade levels at least 2 years lower than age-grade norms (Fleischman & Zehler, 1993).

The reasons for the poor performance of English language learners are complex but stem in part from educational practices that are not aligned with their needs. Improvements are needed in student identification, needs assessment, staff development, curriculum and instruction, articulation with other school programs, assessment, and parent and community involvement. As one example, a recent longitudinal study of bilingual and structured immersion programs concluded that, regardless of program type, teachers offered a passive language learning environment and few opportunities to practice higher order thinking skills (Ramirez, Yuen, Ramey, & Pasta, 1991). Another recent study found that 70% of bilingual teachers and 60% of English as a second language teachers lack any formal training or certification (Pelavin Associates, 1991).

Characteristics of Second Language Learners

McLaughlin (1992) describes a number of characteristics of second language learners in an attempt to clarify several important misconceptions about second language learning. First, McLauglin points out that the theory of a biological basis for a critical period for language learning has been challenged, and that some of the differences in the rate of second language acquisition between adults and children may reflect social and psychological factors, rather than biological ones. Research suggests that the acquisition of phonological and grammatical skills in a second language declines with

age, but the decline is slow and linear. According to McLaughlin, children may learn a second language more quickly because they are more motivated than adults—certainly in part because they are placed in more situations where they can communicate only in the second language.

Second, the research suggests that younger children, because of cognitive and experiential limitations when compared to older children, may actually be at a disadvantage in how quickly they learn a second language. Aside from pronunciation, the younger-is-better hypothesis does not have strong empirical support in school contexts. Research demonstrates that adolescents and adults perform better than young children under controlled conditions. There may be an illusion that children learn faster than adults, because they do not have to learn as much as adults to be considered competent communicators.

Third, research evidence indicates that time spent on the first language does not detract from the development of the second language (given some exposure to the second language, of course). Moreover, the native language and the second language are complementary rather than mutually exclusive (Hakuta, 1990). In one recent major national study, over the length of a program, children in bilingual classes—where there was exposure to the home language and to English—acquired English language skills equivalent to those acquired by children who had been in English-only programs (Ramirez et al., 1991).

Fourth, a child who is proficient in face-to-face communication has not necessarily achieved proficiency in the more abstract and disembedded academic language needed to engage in many classroom activities, especially in the older grades. Swain (1993) makes the point that

> *educators may be fooled by the verbal fluency of language minority students, such that they do not think that failure in schools has a linguistic basis. However, research demonstrates that minority students with fluent conversational skills in English may still lack the necessary cognitive academic language to adequately comprehend content-based instruction and participate fully in the academic dialogue that constitutes mainstream educational programs. (p. 7)*

There are real differences between embedded and disembedded language, but these differences form a continuum rather than a dichotomy. The attainment of age-appropriate levels of second language proficiency can take from 4 to 7 years (Collier, 1987).

Fifth, there are differences among linguistically and culturally diverse groups in how children learn. Research by cultural anthropologists and developmental psychologists indicates that mainstream American families and the families of many children from minority cultural backgrounds have different ways of talking and interacting (e.g., Heath, 1983; Rogoff, 1990). Many children from the mainstream culture are accustomed to an analytic style, in which the truth of specific arguments is deduced from general propositions. Many children from non-mainstream communities are accustomed to an inductive style of talking, in which fundamental assumptions must be inferred from a series of concrete statements. Furthermore, there are social class differences. In urban centers of literate, technologically advanced societies, middle-class parents tend to teach their children through language. This contrasts with the experience of immigrant children from less technologically advanced non-urbanized societies. Traditionally, teaching in such cultures is carried out primarily through nonverbal means. In addition, children from some cultures are more accustomed to learning from peers than from adults.

In addition to differences among cultural groups, there are differences among learners within groups (Vasquez, Pease-Alvarez, & Shannon, 1994). Lucas (personal communication, 1995), in work with immigrant students, finds variation among learners as a result of differences in background and personality, including the following factors: educational background and quality of previous education; economic resources and socioeconomic context; reasons for coming to the United States; age of arrival in the United States; immigration status; personal and collective strengths and resilience; intergenerational relationships; race; gender; and physical and mental health. For example, some children are outgoing and sociable and learn a second language

quickly. Other children are shy and quiet. Nonetheless, research shows that both types of learners can be successful. In classrooms where group work is stressed, the socially active child is more likely to be successful. In the traditional teacher-oriented classroom, children who are active listeners have been found to be more successful than highly sociable children.

Snow (1992), in a summary of research, highlights the important role that children play in the acquisition of a second language: "Any language system is extremely complex and . . . many aspects of the grammar have never been described and thus cannot be taught; the knowledge acquired by a competent speaker goes far beyond the information given in the input; and the active, creative role of the learner is very important" (p. 16).

Finally, studies suggest that mere cultural and language differences cannot account for the relative school failure of some minorities and the school success of others. According to Ogbu and Matute-Bianchi (1986), minority status involves complex realities that affect the relationship between the culture and language of the minority groups and those of the dominant groups and thereby influence the school adjustment and learning of the minority. The crucial issue in cultural diversity and learning is the relationship between the minority cultures and the American mainstream culture. This relationship is different for different minorities; immigrant or voluntary minorities (people who have moved more or less voluntarily to the United States) experience less failure in school than caste-like or involuntary minorities (minorities originally brought into the United States against their will), because they have less difficulty crossing cultural and language boundaries in school. The meaning and value that students associate with school learning and achievement play a very significant role in determining their efforts toward learning and performance. Involuntary minorities interpret the cultural and language differences as markers of their collective identity to be maintained. Ogbu claims that they tend to equate academic success with the culture and language of White Americans and consequently feel that their identity will be compromised by being successful in school.

Lucas (personal communication, 1995) points out that the presence in both the school and community of support services and of others who speak the same non-English language influences the educational experiences of second language learners, as do the attitudes of people in the community toward languages other than English.

These findings have implications for classroom instruction. First, teachers should not expect miraculous results from children who are learning English in the classroom context. Children are not better language learners than adults, and younger children may not be better language learners than older children. All teachers need to be aware that a child who is able to speak and understand English in informal settings outside of the classroom may be much less able to produce and comprehend written English, especially in academic settings. Moreover, because it takes English language learners from 4 to 6 years to acquire the language abilities necessary to participate fully in English-only classrooms, they may continue to need the support of their first language so they will not fall behind in content-area learning.

Second, teachers need to be aware of cultural and individual differences in learner styles. Effective instruction for children from culturally diverse backgrounds requires a variety of instructional activities: small group work, cooperative learning, peer tutoring, individualized instruction, and other strategies that take the children's diversity of experience into account. Teachers need to be aware of how the child's experience in the home and in the home culture affect values, patterns of language use, interpersonal style, and school success. In addition, with respect to second language learning, personality characteristics and motivation play an important role. Moreover, how learning might be enhanced depends not only on the learner's attributes but on how these attributes act in concert with the type of knowledge one is trying to increase.

Third, it is extremely important to encourage situations and settings where English language learners are active learners. In part this means that they have an opportunity to interact with other students, including native English speakers, so that they will have access to English language input that will enhance their second language development. Also, a number of researchers and theorists claim that students who work together on challenging and meaningful academic activities are likely

to support one another's learning of academic content. As aptly stated by Moll (1992), "The role of the teacher, which is critical, is to enable and guide activities that involve students as thoughtful learners in socially and academically meaningful tasks. Students should be encouraged to be active learners using language and literacy, in either English or Spanish, as tools for inquiry, communication, and thinking" (p. 21).

Fourth, there are stages of English language development and appropriate instructional methodologies for each stage. This may mean using slightly different methods or emphasizing certain methods over others at a particular stage. For example, according to Richard-Amato and Snow (1992), lessons in the content areas need to be concrete at early levels. These authors recommend activities that involve the students physically whenever possible. At later levels of proficiency, students may be asked to engage in conceptually complex productive tasks (both orally and in writing) in English. Interestingly, there is some debate as to when and how reading and writing should be incorporated into content-based classes for English language learners. Some educators are concerned about problems associated with approaches that emphasize concrete activities in content-based science classes at the expense of reading and writing about science (T. Destino, personal communication, March 1995).

Just as with classroom practices, schooling must be organized slightly differently for different levels of English learners. For example, Crandall (1993) recommends that the most promising sequence of courses for English language learners consists of basic ESL, followed by content-based ESL, then sheltered instruction (in a sequence of science, math, then social studies) or some paired program, and finally full participation in an English-medium instructional program.

In addition, newcomer programs have been found to be effective for newly arrived English language learners. The assumption underlying these programs is that newcomer students need a period of adjustment to the education system and culture of the United States. This may be especially true for students with limited schooling in their native countries or a history of trauma or violence. The rationale for these programs is that by putting newly arrived students together for a time, districts can concentrate resources and thus better respond to great diversity. In addition, children are protected from potentially hostile environments.

In these programs, children are usually sheltered from the mainstream, either at the same site or at a different site for all or part of the day. During this time, the focus of the program is on rapid English acquisition and basic academic skills in the content areas. These will allow students to transition to the next level of programming. Students and their families are also provided intensive support services, including counseling, tutoring, parent workshops, parent outreach, health services, interpreters, liaison with community services, and career education. Good newcomer programs help students maintain and develop self-esteem by instilling pride in their home language and culture. They also help orient and adjust students to their new school, communities, and country through special classes and extracurricular activities (see Chang, 1990).

Native Language Use

Although there has been considerable debate regarding the merits of structured English immersion,[5] recent research indicates that both English immersion and bilingual program models, when well implemented, are effective in helping children acquire math, English language, and reading skills. A recent report prepared for the U.S. Department of Education (Ramirez et al., 1991) compared outcomes for students through Grade 3 in structured English immersion, early-exit transitional, and late-exit transitional bilingual programs. In a three-way comparison done indirectly by comparing the achievement growth of the children in each of the three programs with that of a norming population, results indicated no significant differences among the three types of programs. In addition, language minority children in all these programs improved their skills in mathematics, English language, and reading more than expected (i.e., in comparison with at-risk students in the general population).

Although well-implemented immersion programs are effective, many experts recommend bilingual programs rather than English-only programs for students who are deemed to be limited English proficient.[6] First, as

evidenced by the Ramirez study, children in bilingual programs will acquire as much English as children in English immersion programs. Moreover, bilingual programs, when well implemented, are effective in helping English language learners acquire subject matter knowledge. Children who are instructed in their native language will not fall behind in content while they are acquiring English. Garcia (1991) and Krashen and Biber (1988) report that Spanish-speaking students progress systematically from acquiring academic skills in the native language in the early grades to acquiring these skills in English in the later grades, without detriment to their ability to perform well in English. Finally, children who are able to acquire literacy skills in their first language can become fully bilingual adults, with the unique advantages that provides.

However, what is ideal is not always possible, and districts will have to develop programs that work in their particular context. The variation in language use depends on the functions served by the non-English languages in the community, the availability of written texts and qualified teachers in those languages, the composition of student groups with respect to language proficiency, and most important of all, the language goals of each particular program.

Equity Issues

In assessing and improving schools for language minority children, equity issues must be addressed. They include the low socioeconomic status of many English language learners, distribution and use of resources, the status of school personnel who work with English language learners, and the attitudes of school staff, other students, and the community toward language minority children and their families.

Many students deemed to be limited English proficient live in poverty. According to a recent report (Fleischman & Zehler, 1993), the socioeconomic status of these students is lower than that of the general school population, as measured by their eligibility for free or reduced-price school lunches. Overall, 77% were eligible for free or reduced-price lunches, contrasted with only 38% of all students in the same schools. Research evidence documents that children raised in families with low socioeconomic status do not fare as well as children raised in families with high socioeconomic status in terms of intellectual and social development, behavior problems, and delinquency (Huston, McLoyd, & Garcia, 1994). There is ongoing debate over the reasons for these differences in development.

Some differences are clearly a result of limited access to resources. A large proportion of English language learners live in high poverty areas and thus attend schools with fewer resources (Moss & Puma, 1995). This is due to districts' reliance on local property taxes, which creates inequality in per pupil spending between districts. For example, in 1987, Mississippi's lowest spending district spent $1,324 per pupil, while its highest spending district spent $4,018. The same year, the highest spending district in the country, New York City, spent $11,544 per pupil. This situation is aptly described by Taylor and Piche (1991):

> *It is not unusual for economically disadvantaged students in these [poor] districts to enter school without preschool experience, to be retained in the early grades without any special help in reading, to attend classes with 30 or more students, to lack counseling and needed social services, to be taught by teachers who are inexperienced and uncertified, and to be exposed to a curriculum in which important courses are not taught and materials are inadequate and outdated. (p. x)*

This is also corroborated by data from the 1990 national assessment of eighth grade mathematics programs by the National Assessment of Educational Progress (NAEP). It revealed a striking connection between students' economic status and the resources provided for them in their classrooms. While 84% of teachers in schools with middle- or upper-class students received all or most of the materials and resources they asked for, 59% of teachers in schools with the largest percentage of poor students received only some or none of the instructional materials and resources that they sought (Educational Testing Service, 1991). Moreover, higher spending districts had smaller classes, higher

paid and more experienced teachers, and higher instructional expenditures, while students in poor school districts were more likely to lack necessary instructional resources.

The relationship between funding levels and student outcomes has been a matter of much controversy. Some experts claim that giving more money to schools is not the answer to improving student performance. While per pupil spending has increased for most of this century, American students have slipped or improved only slightly. Partly, this is the result of resources used for reducing class size and increasing the number of teachers with advanced degrees—strategies that have proved ineffective in improving schools (see Brookings Institution, 1994). A reanalysis of data from earlier reviews, using more sophisticated synthesis methods, shows systematic positive relations between resource inputs and school outcomes. More specifically, the pattern of effect sizes is more persuasive for global resource variables (per pupil expenditures) and for teacher experience than for more specific resource variables (teacher salary, pupil/teacher ratio, administrative inputs, and facilities). The only variable that did not matter in this analysis was teacher education. The authors suggest that findings indicate that resources matter, but allocation of resources to a specific area may not be helpful in all situations (see Hedges, Laine, & Greenwald, 1994). In addition, experts would agree that it is very important to conduct evaluations of the reforms that have been implemented with additional resources to ensure that there is value added by the new programs or practices.

According to a sociocultural perspective (see Diaz, Moll, & Mehan, 1986; Mehan, 1991), the problems that linguistic minority children have cannot be attributed exclusively to their linguistic background. Rather, the discourse and social organization of schools create barriers that impede this group's academic and intellectual development. For example, students who enter school from linguistic and ethnic minority backgrounds may not have had experience at home with the special features of classroom discourse. According to Mehan (1991), "The discourse of the classroom, then, is composed of known-information questions, uses ideas out of context, and celebrates the grouping of ideas into abstract taxonomies and schemas. Students from low-income and linguistic and ethnic minority backgrounds need to acquire this code; their academic success is linked to it, because teachers judge students on their acquisition of the discourse and culture of the school" (p. 4). Students from minority backgrounds thus need to acquire a new, special code. Because the discourse patterns that involve mainstream children at home are similar to the ways of talking that they encounter at school, they do not face the same challenge. Moreover, English-language educational programs, as presently structured, systematically underestimate the capabilities of language minority students. For example, some language minority students enrolled in these programs have considerable subject matter knowledge as a result of schooling in their home countries. However, they do not have access to content classes that adequately reflect their level of knowledge, because they are unable to communicate effectively in English—the language that teachers and students typically use in academically challenging classes.

The relative status of the school staff who work for and advocate on behalf of English language learners will also have a large impact on how these children are educated. In many schools, teachers and programs for these students are marginalized; as a result, teachers of English language learners do not participate in decision making, their students do not have access to the same resources as other students, and they are not held to the same standards (Lucas, Henze, & Donato, 1990; Olsen et al., 1994).

The attitudes of school staff, other students, and the community toward the culture, language, and potential of English language learners also have a bearing on their education. In reviews of effective programming for second language learners, many authors note the critical importance of staff and community attitudes (see Berman et al., 1992; Carter & Chatfield, 1986; Stedman, 1987). In effective schools for language minority students, school staff, students, and community members value English language learners and their native languages and cultures, and challenge bigotry, prejudice, and discrimination. In addition, school staff expect that these students can learn to high standards (Berman et al., 1992).

Systemic Reform

Although the criteria contained in this school change model are not focused on district, state, or federal levels, the authors welcome new standards-based reform initiatives that attempt to align federal, state, and local policies. *Goals 2000* and the *Improving America's Schools Act*, which amended and reauthorized the *Elementary and Secondary Education Act of 1995*, and many state reform efforts ask schools to set high content standards for their students and assess how well they are doing in accomplishing their goals. Many recent initiatives attempt to reduce burdensome regulation in exchange for improved student performance at the school level.

Standards that assure equal delivery of instructional opportunities, currently known as opportunity-to-learn standards, are also a component of these recent policy initiatives. *Goals 2000* requires states to establish voluntary opportunity-to-learn standards or strategies that lead to successful academic outcomes, as reflected in all students' ability to meet high performance standards aligned with content standards in multiple disciplines. Title 1 of the *Improving Americas Schools Act* requires state plans to describe strategies for ensuring that students served under the Act are given the opportunity to acquire the same knowledge and skills and held to the same expectations as all children.

This model is consistent with the current ideas of policy experts who maintain that top-down regulation of opportunity-to-learn standards by states will not automatically lead to changes in curriculum and teaching. Instead, they recommend bolstering necessary regulations with the provision of "enabling conditions for good teaching" (Elmore & Fuhrman, 1994). To accomplish this, states must shift toward more localized bottom-up means of improving schools, whereby stakeholders (e.g., teachers, administrators) play a key role in developing and implementing reforms in curriculum and teaching practices. One such approach to building school capacity is through inspectorate-type systems that help schools examine, reflect upon, and improve curricula and instructional practices.

DESCRIPTION OF THE SCHOOL CHANGE MODEL

Our model is organized around two broad categories: (1) school-wide culture, policies, and practice; and (2) classroom culture, policies, and practice. Within each broad category there are subcategories. The first includes school culture, school-wide policy and organization, home/school/community partnerships, curriculum, student assessment, staff knowledge base, professional development, and program evaluation. The second includes creating a positive learning environment, designing and delivering instruction, providing a framework and context for instruction, and creating opportunities for extended dialogue. The remainder of this paper is organized according to these two broad categories and their subcategories (see Figure 1 on pages 10-11). The section for each subcategory begins with a brief review of relevant research, followed by a description of attributes and exemplars of effective practice.

Effective schools for English language learners share many of the features of effective schools for any group of students, regardless of their special strengths or needs. Therefore, in the discussion preceding each section, we describe features that characterize all good schools. However, because the focus of this work is on the attributes most important for educating English language learners, not all of these generic features are included as attributes and exemplars. Some generic features *are* included as attributes and exemplars, however — those that we consider particularly important for English language learners. We acknowledge that the distinction between those with particular importance for English language learners and those that are less crucial may be an arbitrary one. Not all the attributes are equally important, but together they provide a blueprint for effective schooling.

Figure One: Outline of the School Change Model

I. SCHOOL-WIDE CULTURE, POLICIES, AND PRACTICE

School Culture

The school community . . .

- fosters a safe and respectful environment.
- values and nurtures English language learners and their native languages and cultures.
- challenges bigotry, prejudice, and discrimination.
- demonstrates high expectations for all students.
- has and continues to develop a shared vision and common goals for all students.

School-Wide Policy and Organization

- Design of the instructional program is based on school and community contextual factors and goals.
- Articulation and coordination exist within schools and between schools.
- Academic support services and extracurricular activities are designed to serve and include English language learners.
- Teachers with appropriate expertise are working with English language learners.
- There is flexible use and expansion of instructional time.

Home/School/Community Partnerships

- There is a wide range of parent/community activities.
- Activities linking parents and schools are linguistically and culturally accessible to language minority parents.
- Regular communication takes place between teachers and parents.
- The community is used as a resource.

Curriculum

Core curriculum for all students . . .

- is aligned with rigorous content standards.
- provides English language learners with rich academic programming, consistent with rigorous standards.
- gives English language learners equal access to high quality resources.
- is designed to accommodate a range of abilities, knowledge, skills, language proficiencies, and learning styles.
- is inclusive of other cultures and languages.

Student Assessment

- Students are assessed for content knowledge and language proficiency.
- Efforts are made to assess students in their dominant language as well as in English.
- Assessments make use of multiple measures and multiple contexts.
- Teachers know the purpose of assessment and communicate this to students.
- Student backgrounds are taken into account when interpreting assessments.

Staff Knowledge Base

- Teachers have specialized knowledge related to circumstances and backgrounds of culturally and linguistically diverse students.
- Teachers have knowledge of strategies compatible with and supportive of cultural backgrounds of second language learners.
- Teachers have knowledge of second language methodology.
- Teachers who teach in a language other than English are proficient in that language.

Professional Development

- Teachers are encouraged to reflect on their own teaching and attitudes about language and culture.
- Staff development is explicitly designed to help all teachers and school personnel better address the needs of language minority students.

Program Evaluation

- Structures are in place to monitor and adapt practices and programs for English language learners.

II. CLASSROOM PRACTICES

Creating a Challenging and Responsive Learning Environment

- Teachers ensure that language minority students work at a level that is challenging yet provides for success.
- School staff foster a challenging, but non-threatening, environment.
- Teachers use human resources to tailor the working environment to meet individual students' needs.
- Teachers manage all aspects of the child's program and communicate with all staff who work with their students.
- Classroom activities are sensitive to and supportive of the life experiences and languages of all children.
- Teachers and staff foster an active and independent community of learners.

Designing and Delivering Instruction

- Teachers use a variety of instructional methods to promote their goals.
- Teachers engage students in meaningful, authentic activities.
- Teachers provide opportunities for and encourage interaction between second language learners and native speakers of that language.
- Teachers help students acquire strategies that facilitate second language acquisition and knowledge acquisition.

Providing a Framework and Context for Instruction

- Teachers forecast—they explain or demonstrate what students are going to do.
- Teachers provide a context for instruction.
- Teachers use, make, and adapt English materials that are comprehensible and conceptually appropriate for English language learners.
- Teachers constantly monitor student activity and progress and provide feedback.
- Teachers build in redundancy to enhance comprehension.

Creating Opportunities for Extended Dialogue

- Teachers are responsive to student contributions.
- Teachers use a variety of discourse strategies.
- Teachers encourage all students to participate in the full range of instructional activities.
- Teachers encourage students to respond in the language appropriate to the lesson but do not devalue students' contributions in their own language.

SCHOOL-WIDE CULTURE, POLICIES, AND PRACTICE

School Culture

School culture can be defined as the values and practices agreed upon by the school community, including students, school personnel, and parents. A first attribute that contributes to a positive school culture, documented by Carter and Maestos (1982), is a safe and respectful environment. Although this attribute is important for all effective schools, we include it here because most English language learners attend high-poverty schools, which are prone to more crime than schools located in more affluent neighborhoods.

Two additional attributes are a school community that values English language learners and their native languages and cultures on the one hand, and that challenges bigotry, prejudice, and discrimination on the other. Carter and Chatfield (1986) find that, in effective schools for English language learners, the staff are convinced that a firm grounding and strong ability in Spanish reading and language arts are essential to English reading. Stedman (1987) identifies ethnic and racial pluralism as a key component of effective schools for language minority children. He claims that teachers and principals in the original effective schools broke down ethnic and racial barriers to equality through the "creation of a learning environment that is open, friendly, and culturally inviting; use of community resources; acknowledgment of the ethnic and racial identity of the students; a view of differences in culture, class, and language as valuable resources that can enrich programs rather than as obstacles that need to be overcome" (p. 219). Lucas (1993) finds that in effective secondary schools, value is placed on students' languages and cultures. In addition, students' native languages are supported in a variety of ways inside and outside the classroom. A culturally supportive school climate also characterized the effective schools described by Minicucci and Olsen (1992) and by Berman et al. (1992).

Cummins (1981) argues that the failure experienced by so many children in school is due not to a language deficit but to the kind of "disempowerment" that prevails in their communities and schools. The patterns of interaction and pedagogical practices that prevail in schools, even those with transitional bilingual programs, succeed only in preserving a system that has disempowered minority students and their families. Consequently, Cummins argues for approaches to language minority children that enable students to take control over their own lives. This view is reflected in the practices of critical pedagogues and social reconstructionists who deal directly with oppression and social inequality based on race, social class, gender, and language affiliation. Grant and Sleeter (1988) provide the following general description of this approach:

> *Advocates of this approach do not loudly and clearly articulate one particular vision of the ideal society. They begin by assuming that resources should be distributed much more equally than they are now and that people should not have to adhere to one model of what is considered "normal" or "right" to enjoy their fair share of wealth, power, or happiness. But advocates believe that it would be another form of elitism for a small group of educators to tell other people what the "right" vision of the better society is. Rather, young people, and particularly those who are members of oppressed groups, should understand the nature of oppression in modern society and develop the power and skills to articulate their own goals and vision and to work constructively toward that. (p. 175)*

A number of educators discuss the importance of instructional approaches that deal directly with oppression and social inequality based on race, social class, gender, and language affiliation. Nieto (1992) has argued that schools and teachers who ignore these issues can contribute to discriminatory and prejudicial attitudes among students. As she puts it, "the problem is that these issues do get addressed, but generally in secretive and destructive ways. Name-calling, rejection, and other manifestations of hostility can be the result" (p. 285). To combat this, racism and discrimination must be addressed directly in the curriculum. Children of all ages must have opportunities to deal with these issues in productive ways. Not only should schools not tolerate or

foster discriminatory actions or attitudes, they should provide children with tools to confront them.

A fourth attribute of a positive school culture is high expectations for all students. Although this is an element in all effective schools, we include it because of its particular importance for English language learners, of whom less is often expected because of their limited proficiency in English. In schools characterized as effective, Carter and Chatfield (1986) find high staff expectations for all children, strong demand for academic performance, and denial of the cultural deprivation argument. Garcia (1991) finds that teachers in effective schools have high academic expectations for all students and serve as advocates for them. According to Lucas et al. (1990), in effective secondary schools, high expectations for language minority students are made explicit.

A fifth attribute is a shared vision and common goals for all students. This is particularly important, because many English language learners find themselves in programs that are marginal to the school or find themselves held to different standards than their mainstream peers. Carter and Chatfield (1986) find that effective schools have common goals both within the school and throughout the district. Stedman (1987) finds that staff in effective schools agree on the school's purpose and approach to educating English language learners, and that staff actively and continually set objectives and establish strategies attached to clear goals. Minicucci and Olsen (1992) find that effective schools attempt to build a shared school-wide vision that includes English language learners.

Attributes and Exemplars

1. The school community fosters a safe and respectful environment.

Exemplar: *Students at the Community School[7] in Rochester, New York have worked with their classroom teachers to generate a set of norms and maxims that make up the school covenant. In addition, representatives from each class are responsible for periodically examining the covenant and making recommendations for changes. These recommendations are voted upon by students, parents, and faculty.*

Exemplar: *The principal at Hawthorne Elementary School in San Jose, California has organized a community watch program to combat the growing incidence of crime (e.g., drug sales and exchanges during evenings and on weekends) on school grounds and in the neighborhood surrounding the school. Community meetings held at the school have focused on ways to address this problem. A number of actions have proved fruitful. For example, since an elaborate system of lights and sensor-activated cameras has been installed at the school, the incidence of reported drug sales has decreased. The local police have documented an increase in the number of phone calls reporting in-progress criminal activity. This is largely due to the call-in program established at Hawthorne. Non-English-speaking adults living in the community call the school and repeat the name of a staff member who speaks their native language. That person is summoned to the phone, and the caller reports the location of a crime in progress. The staff member informs the principal, and the principal then informs the police department.*

2. The school community values and nurtures English language learners and their native languages and cultures.

Exemplar: *The teachers and staff at Douglas School quickly realized that paying lip service to the importance of native language maintenance was inadequate when it came to promoting bilingualism in their school community. Despite lectures and discussions about the benefits associated with speaking languages other than English, students still displayed intolerant attitudes and behaviors when they overheard students speaking an unfamiliar*

language in the halls and classrooms of their schools. However, these attitudes virtually disappeared once native language and foreign language classes were mandated for the entire school. Now students, regardless of background, are expected to spend nearly an hour each day learning or further developing a language other than English. Native English speakers participate in foreign language classes offered in the languages of their bilingual peers. Students from 11 different language backgrounds receive native language instruction organized around themes that are also addressed in their regular classrooms.

3. The school community challenges bigotry, prejudice, and discrimination.

Exemplar: *The teachers at Oakside School, located in a suburban Mexican immigrant community, have decided to spend the year making equity and equality the focus of their social studies curriculum. This decision is based on recent concerns about the increase in discriminatory practices and policies aimed at the Mexican immigrant population. The plan is to spend the first three months of school studying the educational and employment experiences and histories of community members. Winter quarter will be devoted to using data from this study and other social science accounts to develop a theory or set of theories that explain the difficulties that Mexican-descent people face in the school system and economic sector. Spring quarter will be devoted to coming up with action plans that provide solutions to the problems that students have encountered.*

4. The school community demonstrates high expectations for all students.

Exemplar: *The curriculum at Douglas School focuses on a common set of grade-level standards regardless of the students' linguistic or cultural background. These standards are addressed, albeit through different approaches, in students' regular classrooms, content ESL classes, and native language classes.*

5. The school community has and continues to develop a shared vision and common goals for all students.

Exemplar: *The Community School of Rochester, New York is a teacher- and community-initiated school, which means that all facets of the school were jointly decided upon by teachers, parents, and community representatives. Consequently, no one person or group is responsible for the school philosophy, covenant, and curriculum. The overarching philosophy of the school entails a commitment to ensuring that all students are provided with an equal opportunity to learn the same challenging content and high-level skills, and that proficiency in two or more languages will be promoted for all students attending the school.*

School-Wide Policy and Organization

This section describes what is known about procedures and characteristics necessary for the effective maintenance of the day-to-day activity of schools. Two important features are characteristic of all good schools and will therefore not be listed under Attributes and Examplars. The first is effective leadership: principals who are good managers and instructional leaders. Carter and Chatfield (1986) find that effective schools are well managed; the principal ensures that staff understand and accept their roles and responsibilities. According to Garcia (1991), effective principals are well informed about the curriculum and instructional strategies in their schools.

The second feature is a school staff that works together to develop, refine, and implement a common vision. Staff share responsibility with colleagues and administrators for decisions about what constitutes valuable learning for students. This includes their participa-

tion in critically analyzing the school curriculum, identifying new priorities, and communicating necessary changes to the school community. Berman et al. (1992) note the importance of extensive and regular collaboration among teachers, including their involvement in the implementation of decisions on a school-wide basis. Stedman (1987) finds that instructional leadership does not depend solely on the principal, but also on the involvement of school staff. Garcia (1991) notes that teachers in effective schools have autonomy to create or change the instruction and curriculum in their classrooms; principals are supportive of their staff and willing to give them room to implement classroom practices that make sense to them. Findings from the Innovative Approaches Research Project (Rivera & Zehler, 1990) "highlight the importance of an expanded role in which teachers work together to develop and to define the specific application of the innovative model in their classrooms" (p. 16). When implementing these models, the support of administrators within the schools is crucial. Ideally, principals, program directors, and other administrative personnel are involved in training and development activities necessary for innovation.

Another important characteristic of schools that educate English language learners effectively, and the first attribute listed here, is that the design of the instructional program is based on school and community contextual factors and goals. Many evaluators note that there is no one right way to educate English language learners, but that different approaches are necessary because of the great diversity of conditions faced by the schools. They recommend that local staff and community members identify the conditions for which one or some combination of approaches are best suited, then adapt models to match their particular circumstances. For example, Berman et al. (1992) could not identify which of the major approaches to educating English language learners is the most effective under all conditions. On the contrary, they claim that "different approaches are necessary because of the great diversity of conditions faced by California schools" (p. 6). They maintain that the failure of schools has to do with implementation failure, rather than the use of one approach over another.

According to Tikunoff et al. (1991), the form taken by an exemplary Structured Alternative Instructional Program (SAIP)[8] and the nature of its success builds upon and is influenced by its context. As he claims, "Many school districts are faced with student populations that are no longer ethno-linguistically homogeneous and as such traditional instructional strategies are not sufficient to meet their needs. Development and implementation of exemplary SAIPs responded to the changing nature of student populations and also capitalized upon knowledge and personnel" (p. 1).

Cazden (1984), in a study of effective bilingual programs, finds that although all programs combine the continuous development of the native language with grade-level achievement in English, there is diversity in the instructional functions and allotment of time in students' first and second languages. The variation depends on the functions served by the non-English languages in the community, the availability of written texts and qualified teachers in those languages, the composition of student groups with respect to language proficiency, and—most important of all—the language goals of each particular program.

A second attribute that characterizes effective schools is articulation and coordination within and between schools. This includes a smooth transition between levels of language development classes (e.g., transition from content-based English as a second language (ESL) classes to sheltered instruction), coordination and articulation between the ESL or bilingual program and the rest of the school, and coordination between levels of schooling, including grades and schools (e.g., preschool to elementary school). To accomplish this, there must be collaboration among all school personnel and a coordinated district policy regarding English language learners.

According to Carter and Chatfield (1986), specific aspects of the bilingual program that appear to be especially important include careful attention to the issue of reclassification and coordination between bilingual and nonbilingual curricular objectives and materials. They report that in effective schools, the bilingual program is not a separate part of the school but "rather participates in, partakes of, and contributes to the positive student and educational climate outcomes" (p. 226). They stress

that bilingual education programs must be housed within effective schools to be effective; they doubt whether bilingual programs acting independently of an effective school environment can produce sustained positive student outcomes. Short (1991a, 1991b) recommends collaboration between language teachers and content teachers in which they identify the language and academic difficulties and demands that particular subjects and courses may present for English language learners. English as a second language teachers should ensure close articulation between program components and maximize the integration of English as a second language and content area instruction.

Findings from the Innovative Approaches Research Project (Rivera & Zehler, 1990) highlight the value of restructuring schooling to open lines of communication among staff, programs, classrooms, and even schools. Minicucci and Olsen (1992) document coordination and articulation between ESL/bilingual education departments and other departments and between different grade levels in effective schools. Cazden also notes the importance of coordination between the bilingual program and the rest of the school.

Slavin and Yampolosky (1992) describe the central concept underlying the application of the Success For All program for English language learners as "all of the school's personnel working together to ensure the success of every child" (p.1). This includes ESL teachers, who teach reading and who closely integrate instruction in English with the requirements for success in the regular program, especially reading. A three-year evaluation of this program showed strong positive program effects for Success For All students on individually administered reading and English language proficiency measures.

A third attribute is academic support services and extracurricular activities that are designed to serve and include English language learners. Lucas (1993) notes that in effective secondary schools, the school's guidance services, health services, and extracurricular activities are accessible to students still acquiring English. Carter and Chatfield (1986) find that school administrators and staff who are not formally part of special programs for language minority students actively support programs and services for these students and counselors give them special attention.

A fourth attribute is that teachers with the appropriate expertise are working with English language learners. Stedman (1987) finds that there is thoughtful assignment of teachers, where teacher strengths are matched to student needs. Berman et al. (1992) document that trained, committed, and sensitive classroom teachers, resource teachers, and aides are the key to sound implementation of programs for English language learners. Tikunoff et al. (1991) find that exemplary SAIP sites are characterized by the availability of expert teachers and states that "they drew from an available cadre of trained, experienced ESL or bilingual education teachers. Other sites placed heavy emphasis on attracting teachers known for their content-area effectiveness. Some exemplary SAIPs solicited both effective content-area teachers and those who had worked effectively with English language learners" (p. 2).

A fifth attribute is the flexible use and expansion of instructional time, including longer blocks of time for instruction and extra time for students who need it to meet district academic standards. A recent report of the National Education Commission on Time and Learning (1994) aptly states that "if experience, research, and common sense teach nothing else, they confirm the truism that people learn at different rates, and in different ways with different subjects. But we have put the cart before the horse . . . by defining boundaries of student growth by schedules for bells, buses, and vacations instead of standards for students and learning" (p. 7).

Attributes and Exemplars

1. The design of the instructional program is based on school and community contextual factors and goals.

Exemplar: *At Douglas School, teachers despaired over what they perceived to be a lack of involvement on the part of language minority parents in the schooling of their children. Because parents did not volunteer in their children's classrooms or spend much time at school, teachers assumed that they did not value schooling. The bilingual resource*

teacher, who had a considerable rapport with students' parents, felt that the teachers were missing the mark in their evaluation of parents' perceptions about schooling. Consequently, she initiated a series of schoolwide panels that provided a forum for parents to share their experiences with schooling in their home countries. During these panel discussions, parents from different cultural backgrounds described how schools functioned in their countries, what kinds of things were expected of teachers, and the level of involvement or participation required of parents. Teachers were surprised to discover that parent participation in schools was not always encouraged in other countries. They were also shocked to learn that some groups assumed that teachers would be addressing areas that were not included in their current curriculum. Topics brought up in these panels became the subject of many interesting conversations between teachers and parents. Parents became more involved in their children's education, and they even initiated a series of curriculum reforms that placed greater emphasis on certain subject areas such as science and history.

Exemplar: *Native language maintenance is a concern of parents and educators throughout the San Francisco Bay area. At San Ramon School, parents and educators have come together to address this issue by making sure that the Spanish-speaking and English-speaking children who attend this school have opportunities to use and learn in both languages. To achieve this goal, the curriculum is organized so that a specific language is allocated to a specific content area. For example, science is taught in English during the primary years, while math is taught in Spanish. Children have access to language arts classes in both Spanish and English. When it came to addressing this issue at Wilson School, which serves over 15 different language groups, parents opted for developing an after-school native language program. This program, which is both run and financed by parents, provides language arts classes in Spanish, Chinese, Japanese, Farsi, and Russian. Teachers are recruited from the local community. Parents pay a small fee for enrolling their children in 60-minute classes held on Tuesday and Wednesday. Prior to initiating classes, teachers receive instruction from the district director of bilingual education on how to enhance the development of native language literacy.*

2. There is articulation and coordination within schools and between schools. This includes a smooth transition between levels of language development classes (e.g., from content-based ESL to sheltered instruction), coordination between the ESL or bilingual program and mainstream classes, and coordination between levels of schooling (i.e., from one grade to the next and between schools). This calls for collaboration among all teachers and programs in the school as well as between schools.

Exemplar: *At Ryan Middle School, content ESL teachers and regular classroom teachers meet every April to make decisions about where to place English language learners during the upcoming academic year. In a series of meetings, content ESL teachers describe learners who are ready or nearly ready to participate in the mainstream curriculum. Content ESL teachers and regular classroom teachers go over student portfolios and scores on English language proficiency tests. Special attention is paid to those students who are borderline cases. Sometimes regular classroom teachers are asked to interview students to determine whether or not they will be able to participate effectively in their classrooms.*

3. Academic support services (e.g., guidance and health) and extracurricular activities are designed to serve and include English language learners.

Exemplar: *At Oakside School, local community members are important resources in the after-school program. Individuals from the surrounding Mexican immigrant community are called upon to teach courses to parents and children in the school community. The after-school curriculum includes classes on Mexican folk dancing, cooking, legal issues, and Mexican literature. For several years, the community has requested that a Spanish-speaking family therapist be based at the school. Recently, the principal was able to secure district support for such a position.*

4. Teachers with the appropriate expertise are working with English language learners.

Exemplar: *Recently, the Oakside City school board has approved a policy that will affect the level of instruction available in schools with a student population that is at least 50% language minority. Teachers who teach in these schools have 3 years to obtain the State of California's new Cross-Cultural Academic Language Development credential. All potential new hires must already have this credential before they will be considered for an interview.*

5. There is flexible use and expansion of instructional time, including longer blocks of time for instruction and extra time for students who need it to meet district academic standards.

Exemplar: *West Meadow School has a comprehensive extended-day and extended-year program. This year, half of the elementary school students can be found in the program on any given day, all on a voluntary basis (on the part of parents). The school offers educational services from 8:00 a.m. until 5:30 p.m. and extended services before school from 6:00 a.m. and after school until 7:00 p.m. Extended services will be available five days a week, 52 weeks a year. Interim sessions will offer 40 extra days of academic time. For example, there are tutorial classes geared specifically for English language learners, where these students receive supplemental instruction aligned with the class curriculum.*[9]

Home/School/Community Partnerships

This section focuses on the activities and policies that lead to an effective relationship among parents, the community, and the schools. The first attribute of effective schools is that there is a wide range of parent/community activities. Effective schools help parents support their children's learning and development through such activities as parent education workshops, multilingual family learning activities, and native language parent groups. Parents are encouraged to volunteer or provide assistance at their children's school and to support and participate in learning activities with their children at home. Some schools also support parents' own educational needs, for example, by providing ESL classes. In effective schools for language minority students, parents and community members share in the governance of the school and become politically involved on behalf of the school. Teachers receive instruction on how to involve parents meaningfully and appropriately.[10]

The second attribute leading to effective and enduring partnerships among schools, parents, and communities is that the activities linking parents and the community to the schools are linguistically and culturally accessible and responsive to parents of English language learners and the community. For example, Delgado-Gaitan (1991) found that parent involvement activities that validated the social and cultural experience of parents allowed them to feel a part of and become active in their children's schooling, thus becoming empowered.

A third attribute is regular communication between school staff and parents, so that parents understand the context in which their children are educated and how well

their children are doing in school. For example, the school provides ongoing information through orientations for new parents, back-to-school nights, and parent teacher conferences.

A fourth attribute is effective and equitable school-community relationships, which emerge when schools view their students' homes and communities—their cultures, knowledge, and abilities—as an important instructional resource.

A number of educators and researchers have identified features of effective parent involvement and home-school partnerships. These features cut across the criteria described above and thus are reported together, rather than as supporting evidence for each attribute. Stedman (1987) finds that effective schools involve parents in three major ways: (1) through good communication between the school and the home, including keeping parents up-to-date about student performance; (2) by involving parents in their children's learning; and (3) through shared governance. Garcia (1991) documents that in effective schools, teachers have a strong commitment to school-home communication, and parents are involved in formal parent support activities. Likewise, Lucas et al. (1990) found that families of language minority students are encouraged to become involved in their children's schooling. Carter and Chatfield (1986) note that the community serves the school, and the school serves the community in many ways. "Interviews and observations over a period of six years clearly demonstrate both community support for and active participation in almost every school activity. School resources are employed to aid in the solution of community problems. The school becomes a focal point of the giving and taking of service; the community serves the school and the school serves the community in innumerable ways" (p. 214).

Attributes and Exemplars

1. There is a wide range of parent/community activities to help parents support their children's learning and development and become involved in their children's school.

Exemplar: *The bilingual teachers at Del Monte Elementary School, located in a farming community on California's Central Coast, involve parents in a series of Sunday afternoon get-togethers. These get-togethers are designed to be festive times when parents, teachers, students, and other family members partake in a meal and entertainment (e.g., singing, dancing, student performances). Each gathering focuses on a particular curricular area (e.g., language arts, science, math) that is part of the teachers' instructional program. Under the teachers' guidance, parents take on the role of students and participate in many of the same instructional activities as their children (e.g., writers' workshop, hands-on math, readers workshop, etc). Afterward, teachers provide a rationale for these instructional activities and generate discussion among parents regarding the efficacy of a particular activity or approach as well as the way it compares with the instructional experiences of parents in their native countries. Finally, teachers offer recommendations about the kinds of things parents can do to enhance their children's learning in a particular curricular area.*

2. Activities that link parents and schools are linguistically and culturally accessible to language minority parents.

Exemplar: *At Douglas School, no note or document is sent home to parents of English language learners that has not been translated into the student's native language. Fortunately, Douglas has access to a staff that speaks over 15 different languages. In addition, the district office has established contact with the growing number of foreign students at a nearby university. Through these contacts, the district has identified other individuals who are literate in those languages that are not spoken by members of the school staff. For a small fee, these individuals translate written documents that are sent home to parents.*

3. There is regular communication between teachers and parents, so that parents understand the context in which their children are educated and how well their children are doing in school.

Exemplar: *An important goal at Oakside School is to enhance school personnel's relations with community members. Consequently, the school decided to devote a portion of its budget to hiring a community-based person who will act as a liaison between the school and community. They hired Ms. Lopez, a former student in the school who is now studying to be a family therapist. She has initiated a parent support group that meets twice a month. During meetings, parents share concerns they have about their children, particularly how they are faring at school, and brainstorm ways to address these concerns. As a consequence of her visibility and excellent reputation among parents and teachers, Ms. Lopez is frequently asked to participate in parent-teacher conferences. During these conferences, Ms. Lopez may be called upon to act as an interpreter, to help explain a parent's or teacher's view or concern, and to help identify ways to address problems or concerns. Afterward, Ms. Lopez spends time with each participant to make sure that they understood one another's concerns and any course of action that may have been agreed upon.*

4. The community is used as a resource. The cultures, knowledge, and abilities of community members are incorporated in the school program.

Exemplar: *The teachers at Kennedy Middle School frequently draw upon community resources in their teaching. Community members are frequently asked to share their knowledge of a particular subject area. Interviews represent one common format for obtaining information. Field trips are another effective way of connecting curriculum to community. Frequently, ideas for field trips come from students. For example, during a unit on immigration, students decided to visit the local INS office to learn more about current immigration policies. Once there, they spent time interviewing employees and collecting literature.*

Exemplar: *The teachers at Oakside School, which serves a predominantly Latino population, have decided to become involved in a research project on community funds of knowledge directed by University of Arizona Professor Luis Moll, under the auspices of the National Center for Research on Cultural Diversity and Second Language Learning. A cadre of eight teachers has decided to spend time learning about their students' families and communities so that they can become familiar with the knowledge sources available to community members and use those knowledge sources in their classrooms and curricula. To do this, they have decided to involve different community members and parents in ethnographic interviews several times during the course of the school year. These interviews are designed to elicit knowledge possessed by different individuals. The ultimate goal is to incorporate community-based knowledge into the school's curriculum.*

Curriculum

In effective schools, the goals and objectives for the year define rigorous content consistent with professional and community standards. Smith and O'Day (1990), in a seminal paper on systemic school reform, call for curriculum frameworks that set out the best thinking in the field about the knowledge, processes, and skills students need to acquire. This strategy has been bolstered by newly re-authorized federal legislation, such as *Goals 2000: The Educate America Act* and the *Improving Americas' Schools Act*, as well as through recent state curricular reform and the work of national standards-setting groups in the major disciplines.

Many of the current frameworks stress the importance of different types of knowledge. Dillon (1986) claims that curriculum must reflect three types of knowledge: declarative, procedural, and metacognitive (self-knowledge). Although declarative knowledge has received the most attention from curriculum developers, it is by no means the most important. For example, in mathematics learning, students need practice in problem representation—sorting problems by type, selecting pictures corresponding to problems, and sorting relevant from irrelevant information (procedural knowledge)—as well as computation skills (declarative knowledge). Knowledge of executive processes (metacognition) has received the least amount of attention despite their important role in problem solving.

A first attribute of effective curriculum is that the core curriculum for all students, including English language learners, is aligned with the standards or frameworks described above. Carter and Chatfield (1986) note that effective schools have a well developed and quite specific curriculum continuum in which goals and objectives are detailed and grade-level expectations are clear. Garcia (1991) reports that teachers ensure that instruction revolves around themes covered in the school district's content and skill-related goals and objectives for that grade level. Cazden (1984) finds that students in effective bilingual programs have access to the same content matter as other students.

A second attribute is that effective schools for English language learners provide rich academic programming consistent with the established standards. Schools documented by Stedman (1987) have academically rich programs in which student development and the provision of a well-rounded curriculum are primary goals. Carter and Chatfield (1986) note a strong academic orientation in which teachers go beyond basic skills instruction. The Innovative Approaches Research Project highlights the importance of providing language minority students with instructional content that is challenging; children in these models became engaged and challenged when presented with complex and challenging academic tasks. Crandall (1993) recommends increasing the cognitive nature of the ESL classroom through greater attention to thinking skills, study skills, and problem solving. For content classes, she recommends "providing the same basic curriculum for LM [language minority] students, but adapting it to reflect both their linguistic development and prior knowledge, while paying attention to vocabulary and schema development" (p. 14).

A third attribute is that English language learners have equal access to high quality curricula aligned with district and state content standards. Many recent reports stress the importance of opportunity-to-learn standards and include among them access to curriculum that meets the content standards (e.g., Independent Commission on Chapter 1, 1992; Stanford Working Group, 1993).

A fourth attribute is that English language learners participate in a school curriculum designed to accommodate a range of abilities, knowledge, skills, first and second language proficiency, and learning styles. Many of the schools described as effective design instruction to accommodate these differences by mixing and matching variables, such as how much native language is used for instruction and the difficulty of the content being presented to the students. Lucas (1993), in a review of successful secondary school programs, finds that language minority students are more likely to achieve when a school's curriculum offers variety in three areas: (1) the skills, abilities, and knowledge that classes are designed to develop (e.g., native language development, ESL, and academic content); (2) the degree of difficulty and sophistication among available classes (i.e., advanced as well as low-level courses); and (3) the approaches to teaching content (e.g., native language instruction, content ESL, and specially designed instruction in English). Buchanan and Helman (1993) recommend that, although the essential math objectives remain unchanged for English language learners, the curricula should be modified to take into account students' ages, developmental levels, and English proficiency. They also point out that specific gaps in student knowledge must be taken into account.

The fifth attribute is that the school-wide curriculum is inclusive of other cultures and languages. A key finding from the Innovative Approaches Research Project is that the instructional content is personally and culturally relevant to students. Gonzalez et al. (1993) propose that the

knowledge and other resources found in local households be used to develop, transform, and enrich classroom practice. Moll (1992) emphasizes the importance of utilizing available resources, including the children's or parents' language and knowledge, in creating new, advanced instructional circumstances for the students' academic development. Pierce (1991), in a re-analysis of the effective schools literature, finds that effective schools serving language minority students incorporate students' culture into the school's curricular and extracurricular activities.

Attributes and Exemplars

1. The core curriculum for all students, including English language learners, is aligned with rigorous content standards.

Exemplar: *Teachers in the Monterey region of the Central California Coast are currently working together to reorganize the math curriculum in their schools and districts so that they will address the set of standards developed jointly by the Commission on Standards for School Mathematics and the National Council of Teachers of Mathematics. Bilingual teachers, ESL teachers, special education teachers, and English-medium classroom teachers who work in so-called mainstream settings are all involved in this regional effort to ensure that this important curricular reform reaches all students.*

2. Schools provide English language learners with rich academic programming consistent with rigorous content standards.

Exemplar: *The staff at Monte Vista High, which serves students from 6 different language groups, has recently developed a content ESL program that involves all students deemed to be limited English proficient. Students at the very beginning stages of English language development participate in English language classes that focus on the development of the communicative skills that they will need to function at school and in the community. Once students have mastered some basic high school survival English (after one quarter), they are enrolled in content-based classes in math, science, social studies, and language arts. Although the concepts covered in each course are aligned with district and state content standards, teachers—who have joint certification as content-area teachers and ESL teachers—use a variety of approaches that make the content comprehensible to students. As they do this, they ensure that students are engaged in complex and challenging tasks.*

3. English language learners have equal access to high quality resources.

Exemplar: *The school library at Douglas Elementary School contains an extensive collection of materials that provide access to the core curriculum for ESL students, including supplementary and audiovisual materials. These are available in the native languages of the students as well as in English at a variety of proficiency levels. An important job of the school librarians is to help students and teachers locate appropriate materials that English language learners can understand. Often librarians will search for these materials in local public libraries and at other school sites.*

4. The school curriculum is designed to accommodate a range of abilities, knowledge, skills, first and second language proficiencies, and learning styles.

Exemplar: *Although all programs at Kennedy Middle School must address a common*

set of grade-level standards, the means for addressing these standards tend to vary across programs. For example, there is a tendency to rely on more hands-on activities, schema building, visuals, and realia in English-medium content classes that are available to English language learners. Although some regular classroom teachers may ask students to do exercises in textbooks, content ESL teachers have found this to be inappropriate with English language learners, who need to link their academic work to concrete experiences or representations of events and concepts. Consequently, money once used to purchase textbooks in the ESL program is now used to purchase other materials.

Exemplar: *High school students who are recent arrivals to the United States and who are deemed non- or limited English speaking spend between 12 and 18 months at Newcomer High School. While there, they take courses that focus on English language development and some content areas. In the case of Spanish and Chinese speakers, content courses are provided in the students' native language. Because many new arrivals have had little or no previous experience in school, these students also participate in classes and support groups that provide an orientation to American schooling. Students participate in a variety of activities that introduce them to school (e.g., they visit schools throughout the area, they talk with teachers about expectations regarding behavior, they discuss any anxieties or questions that they have about school). Every effort is made to conduct these orientations in students' native languages. In addition, students have access to special tutorial assistance designed to help meet their individual academic needs. Although most students leave Newcomer High School after a year, a small group of students often stays an extra year or two, until they feel prepared to face the challenges of a regular high school curriculum.*

5. School-wide curriculum is inclusive of other cultures and languages.

Exemplar: *Parents and faculty at Douglas Elementary School are committed to offering native language and foreign language classes in the 21 different languages of students enrolled at this school. Over the years, they have developed a number of different strategies to recruit teachers who are native speakers of these languages. These strategies include recruiting teachers from abroad to spend a specified amount of time in a teacher exchange program; training parents to teach language classes; and combing the local community for trained teachers who are native speakers of students' home languages. Because the population of the community is in flux and people from a variety of countries are constantly entering and leaving the area, these efforts must be ongoing. To maintain these efforts, parents and teachers have formed a teacher recruitment committee.*

Student Assessment

In this section we focus on one important role of assessment: to inform instructional practice. In order to monitor student progress, the content of the assessment is aligned with the curriculum, so that teachers and students learn from it.

English language learners are assessed for multiple purposes: screening for a native language background other than English; evaluation of English proficiency level, with attention to evidence of limited English-language skills that would restrict successful participation in English-only classrooms; placement into the appropriate learning experiences and language-assistance programs; and monitoring academic progress and making changes in the nature of language-related academic services received.[11]

A first attribute, then, is that English language learners are assessed for both content knowledge and language proficiency. Hamayan (1993) maintains that students' proficiency in the second language needs to be assessed for two purposes: to gauge the progress that students are making in English and to provide information for interpreting students' performance in the academic content areas that are taught in English.

A second attribute is that when assessing content knowledge, school staff make an effort to assess students in their dominant language as well as in English. Where appropriate (i.e., not where native language loss has occurred or first language skills are marginal), all English language learners have a right to assessment in their native language as well as in English, and placement judgments should not be based on English performance alone (August, Hakuta, & Pompa, 1994; Saville-Troike, 1991). According to Hamayan (1993), for English language learners who have mastered academic concepts and skills in their first language, academic assessment in only English will result in serious underestimates of their academic achievement and thus in improper placement in academic classes.

A third attribute is that content knowledge and skills and language proficiency are assessed using a variety of measures (e.g., observations, interviews, samples of student work, criterion-referenced tests, portfolios). Moreover, knowledge and skills are evaluated in multiple contexts. Navarette, Wilde, Nelson, Martinez, and Hargett (1990) provide an excellent review of informal assessment techniques that include both unstructured (e.g., writing samples, homework, logs, games, debates, story-retelling) and structured (criterion-referenced tests, cloze tests, structured interviews) techniques, as well as a combination of the two (portfolios). They also provide guidelines for increasing the reliability and validity of the assessments. Genesee and Hamayan (1994) stress the importance of an assessment process that incorporates information about the student in a variety of contexts obtained from a variety of sources through a variety of procedures.

Pierce and O'Malley (1992) describe performance assessment procedures for monitoring the language development of language minority students in the upper elementary and middle school grades. For example, to determine oral language comprehension and production, they recommend that teachers administer performance assessments that reflect tasks typical of the classroom or real-life settings. In this way, assessment is authentic and aligned with both the curriculum and students' prior experience. As examples, they cite oral interviews, story retellings, simulations/situations, directed dialogues, incomplete story/topic prompts, picture cues, teacher observation checklists, and student self-evaluations. They provide recommendations for assessing reading and writing also. In addition, they describe a portfolio assessment framework for monitoring the language development of language minority students that includes designing the portfolio, planning for and collecting the necessary data, analyzing the portfolio contents, and using the results.

A fourth attribute is that teachers are aware of the purpose of the assessment (e.g., language fluency or accuracy, content knowledge) and communicate this to their students. They also keep the purpose of the assessment in mind when scoring student work.

A fifth attribute is that background characteristics are part of the assessment framework. According to Hamayan (1993), knowledge of background characteristics such as literacy in the home, parents' educational backgrounds, and students' previous educational experiences helps put the assessment results in context.

Attributes and Exemplars

1. To provide effective programming, students are assessed for content knowledge and language proficiency.

Exemplar: *At Ms. Reed's school, English language learners are assessed twice during the year to determine their level of English language proficiency and whether or not they meet the criteria for re-classification into content ESL classes. Ms. Reed, who is a maintream classroom teacher, has developed a variety of activities to assess children's understanding of math, the content area that she is responsible for teaching to all students. She*

has found that observing students as they perform various tasks leads to interesting insights about the processes they use. Also, getting students to debrief about the process they used is important but often difficult, and even somewhat inaccurate if the teacher does not speak the student's native language. Consequently, Ms. Reed relies on parent volunteers, district translators, and native language teachers to help her conduct these debriefings with individual students.

2. When assessing content knowledge, school staff make an effort to assess students in their dominant language as well as in English.

Exemplar: *Oakside School is in a suburban school district that has spent the last three years developing performance-based assessments appropriate for all students. To provide an accurate assessment of the many English language learners enrolled in their schools, the district is committed to developing performance-based assessments in all students' native languages. To help them with this endeavor, the district has enlisted the aid of parents, graduate students at the local university, and other community members.*

3. Assessment entails the use of multiple measures (e.g., observations, conferencing, samples of student work, tests). Knowledge and skills are evaluated in multiple contexts.

Exemplar: *Teachers at the Community School in Rochester, New York rely on a variety of data sources when preparing their narrative report cards for English language learners. These data sources include teachers' informal observations of students; findings from miscue analyses; conferences with students; analyses of students' written work; students' self-evaluations; and parents' evaluations of their children. In addition, English language learners at the Community School take the oral language profiency test and math test required of all students in the state of New York.*

4. Teachers are aware of the purpose of assessment—e.g., fluency, accuracy, content knowledge—and communicate this to their students.

Exemplar: *When assessing students' understanding of science and language in her sheltered science class, Ms. Juarez takes notes while students are engaged in the science activities that form the core of her science program. To guide her notetaking, she focuses on the following categories: students' ability to complete scientific activity successfully; students' use of scientific language (e.g., making hypotheses, posing problems, offering solutions); students' use of language for social purposes (e.g., giving directions, commands, courtesy remarks); and students' use of scientific vocabulary. She also uses these categories when assessing the written language students produce in their science logs following each day's activities. Students use these logs to describe the day's activity and any discoveries that they made and to ask any questions they may have. When conferencing with students, Ms. Juarez makes sure she describes their performance in relationship to these specific domains.*

5. In order to interpret assessment information, teachers know and understand the backgrounds of students.

Exemplar: *Once the school year begins, Ms. Juarez makes a point of visiting all of her students and their families at home. If she is unable to speak their native language, she enlists the help of a district translator or community member. Although her visits are brief, she gains an understanding of the individual*

circumstances of each student. Throughout the year, she makes sure to spend time getting to know each student, either individually or in small groups. She invites students to have lunch or breakfast with her in her classroom once or twice a week. She also asks students to fill out surveys and questionnaires about their previous school experiences and their views on a range of topics. Because an important focus of her curriculum is to get students to relate their personal experiences to her science curriculum, she finds that she learns a lot about students during the natural course of the school day.

Staff Knowledge Base

The National Board for Professional Teaching Standards (n.d.) provides an excellent summary of the knowledge all teachers should have. The following captures a portion of their recommendations:

> *In effective schools, teachers and aides understand how students develop and learn. Their knowledge of individual and social learning theory, and of child and adolescent development inform their instructional practices. In addition, teachers have a thorough understanding of the subjects that they teach. Teachers appreciate how knowledge in their subject is created, organized and linked to other disciplines. Teachers also command specialized knowledge of how to convey a subject to students—pedagogical content knowledge including knowledge of the most appropriate ways to present the subject matter to students through analogies, metaphors, experiments, demonstrations, and illustrations; an awareness of the most common misconceptions held by students, the aspects that they will find most difficult, and the kinds of prior knowledge, experience and skills that students of different ages typically bring to the learning of particular topics. Finally, teachers are familiar with curricular resources such as primary sources, models, reproductions, textbooks, teachers' guides, videotapes, computer software, musical recordings. (pp. 10-11)*

The first attribute of staff knowledge is that teachers who work with culturally and linguistically diverse populations have specialized knowledge that relates to the special circumstances, experiences, and backgrounds of their students. Milk, Mercado, and Sapiens (1992) point out that "teacher education programs should focus on how language minority students learn, given their particular needs as second language learners from non-mainstream cultural backgrounds" (pp. 4-5). This would include knowledge about first and second language acquisition.

A second attribute is that teachers have knowledge of strategies compatible with and supportive of the cultural backgrounds of second language learners. Faltis and Merino (1992) find that teachers of language minority students "know the rules of appropriate behavior of at least two ethnic groups and are able to incorporate this knowledge into the teaching process" (pp. 12-14). However, in working with minority groups, Ogbu (1992) cautions that teachers must differentiate between voluntary and involuntary minorities. For voluntary minorities (i.e., immigrants who moved to the United States voluntarily), teachers should learn about the students' cultural backgrounds and use this knowledge to organize their classrooms and programs, to help students learn what they teach, to help students get along with one another, to communicate with parents, and the like. He recommends that teachers learn through observation, asking children questions, talking with parents, doing research, and studying published works. However, for involuntary minorities, such as African Americans, teachers need to recognize that children come to school with cultural and language frames that are oppositional. Teachers should study the histories and cultural adaptations of involuntary minorities to understand the bases and nature of the groups' cultural and language frames of reference. Special counseling and related programs to help involuntary minority students learn to separate attitudes and behaviors enhancing school success from those that lead to "acting White" help students to avoid interpreting the

former as a threat to their social identity and sense of security and to accommodate without assimilation.

A third attribute is that school personnel understand second language teaching methodology. This includes an understanding of the special instructional services that second language learners need at different stages of development; how classroom settings can be arranged to support a variety of instructional strategies; how to structure instruction based on second language acquisition principles; and the ability to deliver an instructional program that provides opportunities for developing all linguistic modalities as well as students' content knowledge. Moreover, Milk et al. (1992) assert that teachers must know how to integrate different levels of linguistic and conceptual complexity in their instructional program.

A fourth attribute is that teachers who teach in a language other than English are proficient in that language and are able to use that language to deliver effective instruction in the areas of the curriculum they are teaching.

Attributes and Exemplars

1. Teachers who work with culturally and linguistically diverse populations have specialized knowledge that relates to the special circumstances, experiences, and backgrounds of their students.

Exemplar: *Teachers and administrators working in the two high schools in a small town on the Central California coast have established a research group to investigate topics that they feel will help them better understand the student population at their schools. Recently, their district has experienced a dramatic demographic shift from a student population that is predominantly middle-class and English-speaking to one whose composition is nearly half Latino English language learners. The predominantly White faculty who work in this district feel that they need to know more about these new students. With the assistance of faculty from a nearby university, the group has decided to devote the next year to assessing and reflecting upon their own understandings about their Latino students. In addition, they plan to investigate topics that will yield information about Latino students' histories, including their cultural practices and the reasons their families immigrated to the United States; students' previous academic experiences in the United States and in their countries of origin; their parents' views and expectations about schooling; and the degree to which they interact with students from other ethnic and linguistic backgrounds. During biweekly seminar meetings, the group plans to discuss their findings and relate them to classroom and school-wide policies and practices.*

2. Teachers have knowledge of strategies compatible with and supportive of the cultural backgrounds of second language learners.

Exemplar: *Ms. Aviles, a second grade teacher at Cesar Chavez School in San Diego, teaches a class of mostly Mexican-descent students. She describes many of the ways she interacts with students as reminiscent of what they encounter in their own homes. As she puts it, "The fact that I am Hispanic means that I discipline more like their moms at times. I really get to their heart. I'll take them outside and I'll bend down to their level and say, 'You know what you just did was not right. You were disrespectful. I think that you need to apologize.' I try to be soft-spoken with them because that's the way I discipline my kids."*

3. Teachers have knowledge of second language methodology. Teachers know how to integrate different levels of linguistic and conceptual complexity in their instructional program.

Exemplar: *Ms. Heinz, an English-medium social studies teacher at Johnson Middle School in the San Francisco Bay area, teaches a linguis-*

tically and culturally diverse class of seventh graders, many of whom are designated limited English proficient. She has found thematic instruction to be particularly appropriate, because she feels that her English language learners are motivated to learn English and content when the focus is on a broad social studies concept. She begins units on various social studies themes by spending at least two weeks immersing students in a variety of experiences that pertain to the subject under study. These experiences include accessing a variety of knowledge sources, including conducting small-scale field study projects (e.g., interviews with community members, field observations in a given setting), readings, media, computerized resources, and visits from experts. To facilitate student understanding, Ms. Heinz periodically meets with students who are grouped in terms of their different levels of English language proficiency to offer an overview of the activities that relate to the topic under study. During these small group sessions, she provides pictorial, written, and verbal overviews of what will transpire. After an activity, she spends time with each group debriefing what was learned, making sure to fill in areas of misunderstanding. She has been able to utilize members of her multilingual staff to help develop written previews and reviews of activities. After immersing students in the topic under study for two or three weeks, she elicits from students additional information that they would like to know about the topic. Using a workshop approach similar to that described on page 42 (see exemplar under attribute 2), she confers with each student regarding the progress they are making researching the topic that they have selected. This approach allows her to tailor her instruction so that she is able to meet the linguistic and content needs of each student.

4. Teachers who teach in a language other than English are proficient in that language. Moreover, they are able to use that language effectively in the subject areas that they teach.

Exemplar: *The bilingual teachers in the Oakside school district are required to pass a State of California approved test that assesses their knowledge of a language other than English. Before being hired by the district, they must also pass a test that assesses their knowledge of language used in the areas of math, science, and social studies. In addition, they are asked to teach content-area classes. Observers then assess their use of language while teaching social studies, science, and math classes.*

Professional Development

In general, exemplary staff development provides teachers with many different opportunities to enhance their own learning. These include occasions when others (e.g., students, parents, colleagues, administrators) observe and offer constructive critiques of their teaching. Teachers have access to workshops, courses, seminars, and other experiences that help them stay abreast of current innovations and ideas in research and practice. A primary attribute of effective staff development is that it encourages teachers to reflect on their own teaching, including their attitudes about language and culture. Milk et al. (1992) stress that "the specific features of a program may be less important than the reflective nature of the process in which the teachers are engaged" (p. 5). (See Freeman & Freeman, 1991; Perez & Torres-Guzmán, 1992). Finally, good staff development is ongoing and may sometimes be initiated and implemented by school staff.

A second attribute of staff development in schools where there are English language learners is that it is explictly designed to help all school staff learn how to work with these students. This is especially important given changing demographics and social circumstances as well as recent developments in bilingual methodology. Carter and Chatfield (1986) find that in effective schools, all school staff are knowledgeable about various aspects

of education for language minority students. In the effective secondary schools documented by Lucas (1993), staff development is explicitly designed to help all teachers and other staff serve language minority students more effectively. Minicucci and Olsen (1992) note that there is ongoing training and staff support involving all teachers in the preparation for and planning of programs for students learning English. Berman et al. (1992) observe that in effective programs, regular classroom teachers have suitable experience and training in cultural sensitivity and knowledge about second language acquisition. Tikunoff et al. (1991) document that in effective SAIPs, there is intensive development of teachers' knowledge and skills in working with English language learners.

Attributes and Exemplars

1. Teachers are encouraged to reflect on their own teaching and their attitudes about language and culture.

Exemplar: *Over the last 10 years the demographic profile of Salinger High School on the California Central Coast has changed from a predominantly middle-class monolingual English-speaking student population to nearly 50% language minority, many of whom are having difficulty in school. In contrast, the majority of the teachers in this district are monolingual English speakers and residents of White middle-class neighborhoods. Because they are aware that they do not understand the perspectives or histories of their language minority students, they have decided to devote staff development time to learning more about their students' communities. Activities that they have organized include forums where parents share their experiences with schools and the academic goals that they have for their children; similar perspectives of local community leaders; and community-based research done by faculty members at the nearby university. In addition, teachers have volunteered to participate in study teams that assess language minority students' perceptions about and experiences at school. With help from faculty who work at the nearby university (many of whose children attend Salinger High School), they are developing procedures for tapping student opinions and experiences. Each group plans to focus on students at a different grade level. One group has decided to interview former language minority students who have either dropped out or graduated from Salinger within the last five years.*

2. Staff development is explicitly designed to help all teachers and school personnel better address the needs of language minority students.

Exemplar: *All staff development opportunities available at Oakside School, a bilingual school serving a predominantly Latino student population in the San Francisco Bay Area, are available to all staff members, including office support staff. In the past, when office staff participation was not required, these individuals were unable to communicate important aspects of the school's approach and pedagogy to parents and other community members with whom they interacted on a daily basis. Since many community members go to the school secretaries when they have questions or concerns, a number of miscommunications have arisen. The most common focused on the use of native language instruction. Because the secretaries had no knowledge of the rationale underlying the school's decision to use students' native languages, they were unable to respond to parents' frequent criticisms of this policy. Now, because all staff members participate in staff development sessions devoted to issues such as native language instruction, all staff members are able to draw on the same knowledge sources in their discussions with parents and others.*

Program Evaluation

In effective schools, there are well-functioning methods to monitor instruction for English language learners and to alter practices if necessary. Carter and Chatfield (1986) aptly describe this as "consciously self-analytical." Stedman (1987) finds careful monitoring and special additional attention to needy students in effective schools. The Council of Chief State School Officers (1992) recommends collecting data to monitor students' success and evaluating program effectiveness while students are in language-assistance programs and after they leave the programs. A report prepared by the Ohio State Department of Education (1986) maintains that in effective schools for language minority children, staff members continually monitor not only individual students' progress, but also the school's progress in providing the kind of atmosphere that promotes positive learning experiences for each student.

To monitor the progress of English language learners as a group, data must be disaggregated by English proficiency status and native language background, where feasible (August et al., 1994; Independent Commission on Chapter 1, 1992; Stanford Working Group, 1993). It is also important to use multiple indicators of achievement and student well-being (e.g., attendance, health) and to involve all stakeholders in the process.

Attributes and Exemplars

1 Methods are in place to monitor practices and programs for English language learners and to alter them, if necessary.

Exemplar: *In the Oakside district, which serves a predominantly Latino student population, schools periodically participate in program self-studies. A requirement of this process is to collect data about the program from a variety of sources, including student performance on standardized achievement tests and performance-based assessments; interviews with students and their families; and focus group discussions that involve teachers, community members, and parents. In an effort to assess the teaching that goes on in the school, teachers are asked to discuss videotaped instructional events with their colleagues. When analyzing these different data sources (e.g., test scores, discussions, interviews), data are disaggregated by English proficiency status and ethnic background of students, where feasible, and emphasis is placed on identifying areas of strength and growth that will be reflected in the school improvement plan.*

CLASSROOM PRACTICES [12]

Creating a Challenging and Responsive Learning Environment

We know that many instructional practices benefit all children. Regardless of their students' linguistic or cultural background, effective teachers establish efficient and flexible classroom routines; communicate classroom rules and procedures; ensure minimal interruptions, including those from misbehaving students; develop student responsibility for independent self-study and learner accountability; maximize use of instructional time; and appropriately use praise and reinforcement (Doyle, 1986; Wang, Haertel, & Walberg, 1993).

However, there are several features of an effective pedagogy that are especially important for English language learners. First and foremost, teachers must make sure that their students are working at a level that challenges them to learn and grow yet provides an experience of success. On the one hand, the provision of challenging work is especially important for these learners, because many of them participate in remedial programs that focus on memorization and decontextualized skills. A growing number of educators and researchers have argued that all students, including English language learners, benefit from a challenging curriculum that "involves students as highly thoughtful learners in socially and academically meaningful tasks" (Moll, 1992, p. 21). The theoretical underpinnings for this view are grounded in constructivist and sociocultural approaches to teaching and learning that emphasize the role that

individual and social resources and contexts play in these processes. At the same time, teachers must make sure that English language learners, as they progress through school, gain the grade-appropriate skills and strategies that are often used as benchmarks for determining their academic competence. These include, for example, the ability to decode, spell, and compute.

A second attribute is that within the context of a challenging and participatory instructional program, school staff foster a non-threatening environment, where students feel comfortable to contribute and participate and where risky, speculative answers are acceptable (Rueda, Goldenberg, & Gallimore, 1992). This is particularly important for English language learners, who may feel ill at ease in classrooms with teachers and students who speak an unfamiliar language and have different cultural or ethnic backgrounds.

Because the language and academic needs of English language learners vary tremendously, teachers cannot rely on a single instructional methodology or specified set of techniques for all of them. To tailor the working environment for these students, effective teachers use a variety of human and material resources such as peers, aides and volunteers, other staff at school, and parents. This is a third attribute of effective classrooms.

Managing and monitoring the multiple and often confusing schedules of their students is a fourth attribute of effective teachers. In many instances, one class or group of English language learners will be involved in multiple and diverse activities and settings. Teachers need to communicate with the various staff members who work with their students to make sure that everyone is addressing student needs in an integrated and coherent way.

A fifth attribute is a responsive classroom environment where teachers support the life experiences and languages of all students. For example, Cazden (1984) argues that the incorporation of home culture and knowledge in class activities contributes to a feeling of trust between children and their teachers. The Innovative Approaches Research Program also documents the benefits of instructional content that is culturally and personally relevant (Rivera & Zehler, 1990). Gonzalez et al. (1993) describe the merits of classrooms that draw upon "funds of knowledge" (the knowledge and other resources) of local households and the community to develop, transform, and enrich classroom practice. In one example, a teacher develops a unit around construction, and parents involved in construction come in as experts to help students learn about this topic. Teachers also use homework assignments to tap students' funds of knowledge.

To create a responsive environment, teachers employ what is known about ineffectual and effective practice with diverse groups of students, while striving to learn more about how best to accommodate the groups that they teach (National Board for Professional Teaching Standards, n.d.). By basing instruction on community-based resources, Moll (1992) has avoided one pitfall often associated with culturally responsive pedagogy, the tendency to base instructional practices on assumptions and stereotypical beliefs that teachers hold regarding groups of students.

A sixth attribute is that school staff make sure that their classrooms are democratic communities of independent learners. For example, The Innovative Approaches Research Project found that effective programs use participatory teaching/learning models that encourage the active participation of all students. The authors believe this is particularly important for language minority students, because "it acknowledges individual learning styles, encourages positive interdependence among teachers and students, allows students to frequently practice language skills and to use newly acquired knowledge in meaningful ways, provides teachers with immediate and important feedback on what students are learning, and allows students to integrate their unique cultural and personal perspectives into classroom instructional activities" (Rivera & Zehler, 1990, p. 20).

Attributes and Exemplars

1. Teachers make sure that their language minority students are working at a level that challenges them to learn yet provides an experience of success.

Exemplar: *The staff at Douglas School have developed a comprehensive approach to content area instruction for their new English language learners. Former ESL teachers, who are*

teamed with mainstream classroom teachers, are responsible for content area instruction as it pertains to English language learners. Often they will work with English language learners on lessons that address the same concepts addressed by their team teachers working with native English speakers. However, they rely on strategies that facilitate students' comprehension (e.g.,realia, demonstration, pantomime, hands-on activities).

2. School staff foster a challenging but non-threatening environment. Students feel comfortable to contribute and participate, and risky, speculative answers are acceptable.

Exemplar: *In Ms. Cummings's second grade science classroom, English language learners are encouraged to share their theories about the different scientific phenomena they will be studying. Because she wants to encourage students to engage in scientific thinking that entails coming up with explanations about how the physical world operates, all responses are accepted and subject to careful examination. The following excerpt from a class session is typical of this teacher's approach to content instruction.*

Teacher: *As you may have noticed, class, two fish in our fish tank died last night. What do you suppose happened?*
Student 1: *They got too much food.*
Student 2: *The tank is dirty.*
Student 1: *But other fish alive.*
Student 3: *Fish got disease. Others will catch it.*
Teacher: *But these fish are from different families. One is a gold fish and the other is a minnow.*
Student 2: *Look, there is green yucky stuff in the tank. All other fish will die too.*
Teacher: *Let's back up and think about all of your reasons for why the two fish died. (Teacher writes children's hypotheses on the board.) Now how can we determine whether or not their death was caused by eating too much food?*

Ms. Cummings then leads the class in a discussion during which they accept or reject each hypothesis.

Exemplar: *Ms. Cain, a Los Angeles teacher, works with students from a variety of language groups, including Armenian, Vietnamese, Korean, and Chinese. During a geometry lesson, she used styrofoam plates to facilitate her Grade 4-6 students' understanding of the relationship that exists between the diameter and radius of a circle. While explaining her understanding of these concepts to a small group of students, one girl accidentally rubbed a styrofoam plate across her shirt and noticed that when she passed the plate over her head, her hair stood up. She then used her first language to draw her colleagues' attention to her hair. Other students in her group immediately started to rub the plates on their shirts or on their hair to create static electricity. Ms. Cain noticed this and decided to draw the entire class's attention to the group's discovery. She then proceeded to elicit from the class what they knew about static electricity. Using concepts that they had addressed in a previous unit on electricity, students provided explanations about how the group of students created static electricity with their styrofoam plates. Ms. Cain then asked students to refer to their science journals, where they had previously written about how static electricity is created. Afterward, she asked pairs of students to once again hypothesize about how static electricity was created using the styrofoam plates. Their hypotheses became the focus of additional discussion about this phenomenon. She then resumed the discussion about the relationship between the diameter and radius of a circle.*

3. Teachers use various human resources to tailor the working environment to meet individual students' needs (e.g., peer-tutors, aides and volunteers, other staff at school, parents).

Exemplar: *Oakside School in the San Francisco Bay area actively recruits individuals from a variety of organizations to volunteer in their classrooms. Retirees affiliated with neighborhood churches, high school students, and professionals who work in the local electronics industry are part of their extensive group of volunteers. Prior to working in classrooms, all volunteers are screened and asked to participate in a six-hour training program, during which they learn about the school's philosophy, some fundamentals about how to tutor students effectively, and school and district-wide norms for interacting with students.*

Exemplar: *Cross-age tutoring is an important component of the program at Riverside School, a multiethnic suburban school that serves over 15 different language groups in the San Francisco Bay area. Fifth graders enrolled at Riverside spend between four and six weeks preparing to tutor kindergarten students in reading and writing. During this time, they observe teachers and parents reading to young children, elicit techniques that they feel contribute to effective reading sessions, and study the emerging writing of young writers. They are then matched up with kindergartners from similar language backgrounds. Prior to tutoring sessions, tutors are expected to develop a work plan (i.e., write down what they will be doing with their tutee), pre-read any books they plan to read with their tutee, and collect any materials that they plan to use (e.g., paper, crayons, tape recorder). After each 20-minute tutoring session, tutors take retrospective field notes that summarize what transpired during tutoring, then write a few sentences assessing what went well and what could be improved upon. These notes are discussed during a 20-minute whole-class debriefing session that involves both the tutors' and tutees' teachers. During these sessions, students bring up problems that they had during tutoring sessions and elicit feedback from their classmates and teachers. Tutees' teachers often call upon tutors' expertise in other ways. For example, tutors are often asked to translate children's books into the tutees' native languages. When there is no school staff member literate in a particular language, these translations are often edited by the tutors' parents.*

4. Teachers are able to manage the child's program. They monitor the multiple and often confusing schedules of their students. They communicate with various staff who work with their students to make sure that everyone is addressing needs of students in an integrated and coherent way.

Exemplar: *There is no one daily schedule that fits the needs of all the different students in Ms. Reed's classroom. Because she involves students in many small group activities, she relies on whole group instruction only a few times during each school day. To help students understand their schedule and report to the appropriate learning center at the appropriate time, students maintain a schedule that is kept on the cover of their notebooks. They must note the different classroom activities in which they participate during the course of the school day. At the end of each activity, they note what they accomplished during each activity and any relevant homework assignments.*

Exemplar: *At Douglas School, English language learners have contact with several different teachers and aides. They spend their morning with classroom teachers who are responsible for*

math and language arts. In the afternoon, they spend an hour in classes taught in their native languages, which are organized around science and social studies concepts that have been decided upon by the entire teaching staff at each grade level. These classes are taught by native speakers of students' home languages, who are recruited from the local community. During the final hour of the school day, students participate in ESL content classes taught by another teacher, who focuses on many of the same science and social studies concepts that were addressed by the native language teachers. For this model to work effectively, classroom teachers, native language teachers, and ESL teachers meet on a regular basis one hour per week to plan the curriculum and discuss students' progress. Four staff development days per year are also devoted to joint planning and curriculum development.

Exemplar: *The Community School of Rochester, New York, where classes are taught by a three-member team that includes one ESL teacher and two regular classroom teachers, has structured each day so that teacher teams spend at least 40 minutes a day together. During these 40-minute sessions from 12:20 to 1:00 p.m., teachers plan the next day's activities and discuss how students are progressing. While teachers meet, students participate in a series of special classes taught by resource teachers in technology, art, music, physical education, and drama.*

5. Classroom activities are sensitive to and supportive of the life experiences and languages of all students.

Exemplar: *The classroom aides as well as other community members in one Oregon school are frequently called upon to make connections between their own experiences and the curriculum. In Katie Collin's seventh grade social studies classroom, she focuses on the themes of immigration, civil rights, and inventions. While the class was studying immigration, Ms. Nol, the Cambodian aide, was interviewed by students who were interested in learning about the different factors that influence an individual's decision to leave their homeland. After working in small groups to generate interview questions, students asked Ms. Nol about her life in Cambodia and why she fled the country. Ms. Nol shared with the children a spell-binding account of Cambodian life under the Pol Pot. When Ms. Nol talked about the civil war in Cambodia, a student asked, "Like the civil war in the U.S. that we studied?" After Ms. Nol described what it was like to work in the fields, another student related her account to the situation of African-American slaves during pre-Civil War times. Several students in Ms. Collin's class come from war-torn countries, and some shared accounts similar to Ms. Nol's, most notably the tragic loss of relatives and friends. In addition to getting Ms. Nol to share details about her life in Cambodia, students asked her about her experience learning English. They wanted to know where she first learned English and how long it took to acquire the language.*

Exemplar: *Teachers like those involved in Luis Moll's project on community funds of knowledge study topics that are part of their students' community's knowledge base. They identify these topics by involving community members in ethnographic interviews. Once a topic for study has been identified, teachers call upon community members with expertise in that topic to assist in their classrooms.*

6. Teachers and staff foster an active and independent community of learners.

Exemplar: *The following is posted on the wall in Ms. Castro's bilingual third grade classroom. IF YOU HAVE A PROBLEM, THINK ABOUT*

IT. IF THAT DOESN'T WORK, GET HELP FROM A FRIEND. IF THAT DOESN'T WORK, GET HELP FROM THE TEACHER. These simple rules are emblematic of the cooperative milieu that Ms. Castro feels enhances students' abilities to learn from themselves as well as from one another. Her classroom is a place where learners rely on multiple knowledge sources (e.g., themselves, one another, visitors, books, dictionaries). As Ms. Castro explains, "In my classroom, students learn and use strategies that they can apply to many different situations. When they have only one strategy, 'Ask the teacher,' they have nowhere to go when the teacher is unavailable. Based on what I know about their lives outside of school, they are fully able to function and learn without having to always ask the teacher or an adult for guidance. My goal is to foster this kind of interdependence in my classroom."

Exemplar: *In Berta Hernandez's second grade classroom at Union School, a Spanish/English bilingual school located in a rural community along California's central coast, children spend the majority of their morning participating in a wide range of activities or experiences that focus on a particular concept, ability, or theme. Ms. Hernandez organizes this portion of the school day so that children are involved in a series of related learning activities that they pursue either independently or with others. For example, during language arts time, different tables and areas of the classroom are set up to accommodate the following activities: journal writing, story dictation, choral book reading, reading a book with the assistance of a tape-recorded version of that book, and letter writing. Small groups of children from a variety of ability and language backgrounds work at each of these centers with one another, alone, or with assistance from a teacher or adult volunteer. At regular intervals, a bell sounds to let children know that it is time to move on to a different center.*

Designing and Delivering Instruction

A first attribute is that in effective classrooms, teachers use a variety of instructional methods (e.g., direct instruction, guided discovery, cooperative learning, computer-assisted instruction) tailored to students' needs and circumstances as well as to their instructional goals. For example, direct instruction is appropriate and beneficial for certain tasks. Research on teaching science has shown that direct instruction has been effective for teaching subject matter knowledge, knowledge of hierarchical relationships among bits of information, and knowledge of valid strategies. Similarly, direct instruction is one approach that may be useful for enhancing beginning readers' ability to decode and use process strategies (e.g., summarize, clarify, question, predict) so that they better comprehend what they have read. Executive processes, such as comprehension monitoring, can also be taught through direct instruction, if developmentally appropriate for the student (Dillon, 1986). Rosenshine and Stevens (1986) argue that direct (explicit) teaching is also highly effective for well structured skill and knowledge domains, such as math computation, explicit reading comprehension strategies, map reading, and decoding. Other evidence of the value of direct instruction for English language learners comes from Carter and Chatfield (1986) and Rivera and Zehler (1990).

While direct instruction may be a preferred method in some circumstances, other methods are also important. Cooperative learning, where students work collaboratively on common academic tasks or problems, is another method that may be particularly appropriate for language minority students, many of whom come from cultural groups where cooperative approaches are highly valued (Cochran, 1989; Kagan, 1986). Rivera and Zehler (1990) maintain that cooperative activities are integral to most of the classroom instruction carried out in the four models selected for the Innovative Approaches Research Project because they facilitate student/student interaction and communication, are an important source of second language (L2) input, provide English language

learners with ample opportunity to acquire the social skills needed to obtain L2 input, accommodate students with heterogeneous knowledge and skill levels, and help foster healthy and harmonious relationships among students. Garcia (1991) maintains that heterogeneous, small-group collaborative academic activities that require a great deal of student interaction are important contexts for cognitive growth. During these events, he has found that students use language to accomplish cognitively complex goals. Milk et. al. (1992) maintain that cooperative learning environments foster the development of social skills needed to access knowledge from others and also provide mutual assistance in pursuit of common goals.

When choosing instructional methods, effective teachers consider numerous variables. They include lesson goals and objectives (e.g., English acquisition or content knowledge; declarative or procedural knowledge), learner characteristics (e.g., ability, interests, learning style, prior schooling, age, cultural background, language background), and resources (e.g., availability of bilingual teachers). For example, Carroll (1986) notes that learning depends upon certain learner attributes acting in concert with the type of knowledge one is trying to increase. He claims that "persons with certain personality characteristics and certain motivations may perform better than individuals with different attributes. In addition, certain attributes may be conducive to learning under certain conditions whereas other attributes may be conducive to learning under other conditions" (as quoted in Dillon, 1986, p. 5). In the case of English language learners enrolled in English-medium classrooms, the level of language proficiency is another factor that must be weighed when making instructional decisions. In short, equitable education entails a careful consideration of the factors that distinguish students from one another. When planning for instruction, teachers must use multiple approaches that are suited to the different strengths and needs that students bring to the classroom.

In effective classrooms serving language minority students, care is taken to align social and physical organizational structures with instructional goals. Examples of different groupings include whole-group teacher-directed, individual students, one-on-one with the teacher, student pairs, small groups working with the teacher, and small groups just with students. For example, Tharp and Gallimore (1988) emphasize the importance of reorganizing schools to allow more activity settings with fewer children, more interaction, more conversation, and more joint activity. They maintain that through "instructional conversations" (discussion-based lessons that focus on an idea or a concept that has educational value and that has meaning and relevance for students), children develop the ability to form, express, and exchange ideas in speech and writing. Swain (1993) maintains that academic and cognitive benefits result from the use of collaborative learning where learners are actively involved through exploration, inquiry, and interaction. She also cites research supporting group work as a way to enhance second language learning.

A second attribute of effective instruction is that teachers engage students in authentic, meaningful activities. The Innovative Approaches Research Project finds that teachers enable students to use language and newly acquired knowledge in meaningful ways (Rivera & Zehler, 1990). This often entails making sure that the subject matter being addressed is culturally and personally relevant (i.e., relevant to the student's life, experience, history, and personal reality).

A third attribute is that teachers provide opportunities for and encourage interaction between children acquiring a second language and fluent speakers of that language. Through interactions with native speakers, second language learners may gain access to language that is unavailable in traditional teacher-directed classroom settings. Indeed, these interactions, which tend to focus on topics and activities of great importance to children, have been documented as important sources of comprehensible input that further second language learning (see, e.g., Hatch, Peck, & Wagner-Gough, 1979).

A fourth attribute is that teachers help students acquire strategies that facilitate second language acquisition and knowledge acquisition. Hernandez and Donato (1991) stress the importance of teachers promoting metacognitive learning strategies. Chamot and O'Malley (1992) have developed the Cognitive Academic Language Learning Approach (CALLA), an instructional method for English language learners who are being prepared to participate in mainstream content instruction. It combines English language development with content-based ESL and strategy instruction. The strate-

gies that are taught include metacognitive strategies, cognitive strategies, and social-affective strategies.

Attributes and Exemplars

1. Teachers use a variety of instructional methods to promote their goals (i.e., they generate multiple paths to knowledge).

Exemplar: *Within the context of her reading program, Ms. Alvarez, a bilingual second grade teacher in the San Francisco Bay area, offers a variety of instructional formats. All students spend some portion of the day reading on their own or in pairs. Ms. Alvarez also provides large group instruction using a format of 10- to 15-minute mini-lessons that focus on a skill or strategy that she feels will benefit the entire class. During reading conferences, she assesses individual students' reading abilities and assists them as they master skills and strategies that enhance their reading comprehension.*

2. Teachers engage students in authentic, meaningful activities.

Exemplar: *John Cain, a third grade teacher in a rural school that serves a largely Mexican immigrant community, has organized his curriculum to focus on a number of critical issues that he feels touch each of his student's lives. Over the years he has addressed environmental concerns (e.g., the Exxon oil spill, toxic waste) and issues of inequity that are particularly relevant to farm workers and to Latinos living in his students' community (e.g., the grape boycott, the working conditions of farm workers, housing). One year, Mr. Cain and his students investigated the use of pesticides and their impact on farm workers and the California grape industry. Students reported on a wide range of related topics, including the experiences of farm workers, the nutritional value of grapes, and the cost of organic versus nonorganic farming. The culmination of their joint effort in this area was a meeting with the head of food services for the school district at which students presented a report of their findings. During this meeting, the students requested and received assurance that grapes would no longer be served as part of school lunches.*

Exemplar: *Teachers at Oakside Elementary School organize their morning around two events, writers' workshop and readers' workshop. Each event lasts at least an hour per day and represents an extended period of time when students read and write on topics of their own choosing. Although children may discuss or confer about what they have read or written, Oakside teachers try to organize these events so that students have ample time to read and write. Indeed, some teachers insist that students spend two or three workshop sessions just reading or writing. Because the development of bilingualism and biliteracy is an important goal at Oakside School, teachers encourage their students to read and write in both of their languages. To make sure that bilingual students, especially those who are fluent readers and writers of English, continue to develop literacy in their first language, teachers will establish special native language writers' workshop sessions during which students are required to write a story or poem that will be given to Spanish monolingual children who live in the neighborhood.*

3. Teachers provide opportunities for and encourage interaction between second language learners and fluent speakers of that language.

Exemplar: *Ms. Mahoney, a Spanish-English sixth grade bilingual teacher in a Central California community, alternates languages for different units. For example, a unit on the water cycle was taught in Spanish, followed by an English-medium unit on the life cycle of a plant.*

Ms. Mahoney's class, which is composed of children who are native speakers of either Spanish or English, is organized heterogeneously so that native and nonnative speakers of each language work together in small group activities designed to enhance their understanding of a particular scientific concept. For example, during the unit on the life cycle of plants, native English speakers were paired with Spanish-speaking children who were minimally proficient in English. They spent several weeks growing, caring for, and documenting the growth of plants under a variety of conditions. During that time, English was used for most, if not all, student/student interactions.

4. Teachers help students acquire strategies that facilitate second language acquisition and knowledge acquisition.

Exemplar: *In Ms. Reed's classroom, students always share the processes that they use to solve math problems. She has found that students often use a variety of approaches to reach the same solution to a math problem. By having students share problem-solving processes with others, she feels that she is enabling students to expand their repertoire of learning strategies.*

Providing a Framework and Context for Instruction

Experts who have taught or studied English language learners in instructional settings recommend various strategies for establishing a framework or context for instruction. The first attribute, forecasting, consists of explaining, and in some cases demonstrating, what students will be doing or experiencing.

A second attribute, contextualization, involves providing a context for instruction. This can be accomplished through schema building, bridging, and the use of realia. Schema building entails providing the learner with appropriate background knowledge to enhance comprehension. Prior to a lesson or instructional activity, teachers may build students' schema by using advanced organizers, giving students general knowledge of the broad picture before studying the details, and organizing curriculum around themes. Bridging involves building on students' previous knowledge and understanding so they can establish a connection between their personal experience and the subject matter they are learning. Use of realia includes employing manipulatives, pictures, the objects and tools associated with a particular subject area, and film.

A third attribute entails using, making, and adapting English materials so that they are both comprehensible and conceptually appropriate for English language learners. When it comes to adapting existing English texts, however, there are different ideas about what is appropriate. For example, some experts recommend reducing non-essential details and simplifying grammatical structures (see, e.g., Short, 1991b). Others, however, maintain that simplifying "surface linguistic features" will not necessarily make the text easier to comprehend. For example, reducing the non-essential details may delete important background information that is crucial to the interpretation of meaning when knowledge of language forms is limited (Saville-Troike, 1991). In processing written text, Carrel and Eisterhold (1987) have shown that providing ESL students with supplementary background information significantly improves reading comprehension, while simplifying the syntactic structure has no significant effect. First language readability studies yield similar conclusions; simplifying sentence structure often makes a text more difficult for native speakers to process, because it reduces redundancy. Clearly, more work is needed in this area.

A fourth attribute consists of constantly monitoring student activity and progress. "Proficient teachers track what students are learning (or not learning), as well as what they, as teachers, are learning" (National Board for Professional Teaching Standards, n.d., p 13). This is particularly important for English language learners, because they are often in mainstream classrooms where they may not fully understand the instructional messages or content. In their discussion of responsivity, Rueda, Goldenburg, and Gallimore (1992) highlight the importance of constantly monitoring students' performance and deciding on the most meaningful next steps, based on an assessment of students' performance.

A fifth attribute is that through classroom activities, teachers build in redundancy to enhance language and academic development. Richard-Amato and Snow (1992) claim that English language learners are much more likely to internalize a given concept if teachers address that concept using a variety of different instructional approaches.

Attributes and Exemplars

1. Teachers forecast; that is, they explain or demonstrate what students are going to do.

Exemplar: *Ms. Reed meets with a group of seven English language learners several times during the day for a variety of reasons (e.g., language arts instruction, one-on-one tutoring). One recurring theme of these meetings, which may last anywhere from 3 to 30 minutes, is to discuss and describe future events and activities. For example, Ms. Reed spent 15 minutes on activities and discussion that focused on an impending field trip to a nearby forest. During this meeting, she told the students about the forest, provided pictures of the terrain that they would be going through, got them to talk about their previous experiences in forests, and provided new vocabulary that they would be having to deal with in their interactions with the nature guides. During this interaction, she was able to address individual questions that students had about the forest and what they would be encountering there. One student, who mistook the word "guide" for "guy" asked her, "How can the guys have name Mary and Suzy?" Ms. Reed was able to clarify the student's misunderstanding immediately in the small group.*

2. Teachers provide a context for instruction through schema building, bridging, and the use of realia.

Exemplar (schema building): *Ms. Rodham routinely spends 5 to 10 minutes in schema building activities when introducing the English language learners in her seventh grade social studies class to a new reading. She has found that different kinds of activities work well with different genres. Prior to introducing a narrative, she often provides students with a timeline of the events recounted in the story or a picture strip that visually portrays these events, as well as a brief description of the main characters. She uses field trips and films to introduce students to the general topic of a new history unit. Before asking students to read a chapter or article, she introduces them to the general theme or topic and to vocabulary words that convey key concepts. Sometimes she will read students a short article, poem, or picture book that addresses the topic of a longer text.*

Exemplar (bridging): *Prior to beginning a new unit that focuses on a particular topic or concept, teachers at Armadillo School in Watsonville, California routinely elicit students' knowledge about the subject to be covered. This often takes the form of having students (often with the teacher's assistance) make a list of what they know about a particular topic. Students are then asked to generate a list of questions they have about the same topic. During this brainstorming activity, teachers note any inconsistencies in students' knowledge that could be the focus of further study. After examining what is known and not known about a topic, students and teacher decide on what aspects of the topic they will address either as a whole group or through individual and small group research projects. When addressing scientific concepts, teachers often ask students to make a hypothesis about a particular phenomenon and to provide a rationale for their hypothesis. Teacher and students then discuss ways of testing their hypotheses. After developing a plan for researching a particular hunch or hypoth-*

esis, students and teacher implement their research plan. Throughout the research project, students and teacher discuss the likelihood that their hypotheses will be proven true or rejected. They also generate and discuss alternative hypotheses.

Exemplar (use of realia): *Photography occupies an important role in Ms. Rodham's classroom. She uses pictures that she has taken of various historical sites in Rochester in her curriculum on the historic figures and events from the Rochester community. Not only do these pictures, which are displayed throughout the classroom, provide an important starting point for different aspects of her curriculum, they also are a focus of a good deal of student talk. Ms. Rodham has found that students' informal academic talk often centers on describing or discussing photographs displayed around her room. Students also take on the role of photographer. They are encouraged to take photographs that capture key themes or events that they have written about. The books that they publish as part of writers' workshop often contain their photographs. Ms. Rodham has found that the decision making involved in planning the photography that is part of students' academic work leads to interesting discoveries and discussions on the part of her students. Issues of access and privacy are recurring themes that students have grappled with when discussing whether or not they need to obtain permission before taking pictures of people.*

3. Teachers use, make, and adapt English materials so they are both comprehensible and conceptually appropriate for English language learners.

Exemplar: *Ms. Reed is careful to provide a variety of materials for the English language learners in her seventh grade social studies class. When covering a curricular theme, like discrimination, she utilizes a range of printed and visual materials, including life photographs, picture books, life histories, personal accounts, novels, news articles, and chapters from history textbooks. She generally organizes these materials so that students have access to visual materials first, followed by narrative accounts, and then expository texts. For beginning English language learners, she often adapts expository texts by providing a summary of the text in the child's native language or preparing a simplified version of the text that relies primarily on a limited range of tenses (present, simple past, and simple future), a great deal of redundancy in the form of paraphrases or expansions, and a specified set of discourse markers and connectives (e.g., first, second, then, because).*

4. Teachers constantly monitor student activity and progress. They provide immediate feedback on how students are doing and make appropriate revisions in instruction based on this assessment.

Exemplar: *All of the written work that students produce each day is kept in a folder that Ms. Reed collects on a daily basis. After school, she goes over the work in each student's folder, making notes about areas of strength and weakness. She has organized her school day so that she can spend the first 45 minutes addressing any confusion or misunderstanding students may have revealed in the previous day's written work. During this initial 45-minute period, students are engaged in a variety of activities that they can accomplish in small groups or on their own so that Ms. Reed is free to spend time tutoring individual students.*

5. Teachers build in redundancy to enhance comprehension through their discourse and through classroom activities.

Exemplar: *Ms. Riles's second grade students, the majority of whom are English language learners, come from several different language groups. To facilitate their understanding and participation, she has developed a set of recurring routines that take place throughout the school day. For example, she and her students typically begin the day with greetings and announcements. Routines that characterize those times of the day dedicated to math, science, and language arts include an introductory time, when the teacher provides students with an overview of a concept that will be addressed in different ways through a variety of different activities that are set up in designated areas throughout the classroom. She also demonstrates or models each activity. Closure is a 10-minute period that ends a block of time devoted to a particular subject area. During this time, the teacher asks the same set of questions: What went well at each center? What was hard to do? What would you have done differently?*

Creating Opportunities for Extended Dialogue[13]

Research focusing on the kinds of discourse that enhance learning and comprehension emphasizes the role of collaborative modes of interaction involving adults and children. A first attribute is that adults or teachers are effective participants in these events and are responsive to student contributions. They involve students in conversations or discourse events in which students are free to explore topics and themes that matter to them.

A second attribute is that teachers are particularly adept at getting students to clarify, revise, or elaborate upon their previous verbal or written contributions. Effective teachers often respond to student statements by paraphrasing or expanding upon students' efforts without negating what students have accomplished on their own. In addition, they encourage students to expand on their statements by using a variety of elicitation techniques, such as questions, restatements, pauses, and invitations to expand (e.g., "Tell me more about that"). They get students to provide bases for their statements, arguments, and positions by having them cite evidence, reasons, and alternative interpretations (e.g., through such questions as, "How do you know?", "What makes you say that?", "Why?"). Moreover, effective teachers encourage all students to participate in conversational events in a variety of ways, both verbal and nonverbal. Instead of expecting or insisting that students respond to questions or comments immediately, they give children time to think prior to responding.

Recently, a good deal of attention has been paid to instructional conversation, a discourse event that many teachers and researchers feel is a key feature of effective classrooms. Instructional conversations, or ICs, are discussion-based lessons that focus on an idea or a concept that has educational value and that has meaning and relevance for students. The teacher encourages expression of students' own ideas and guides students to increasingly sophisticated levels of understanding. Conversations that instruct and stimulate thinking are thought to be particularly important for language minority students, many of whom receive insufficient opportunities for conceptual and linguistic development at school.

ICs are embedded in activities where adults or more adept learners assist students in the performance of a task. These goal-oriented activities must be designed so that teachers can assist children at the appropriate level with the goal of developing higher order mental processes. Experts argue that schools must be reorganized to allow more opportunities for this kind of interaction. This is problematic in classrooms where low student/teacher ratios are not possible. However, emerging instructional practices offer hope of increased opportunities for assisted performance (e.g., increased use of small groups; the maintenance of a positive classroom atmosphere, which increases the independent task involvement of students; new materials and technology with which students can interact independent of the teacher; and systems of small-group classroom organization that allow for a sharply increased rate of assisted performance by teachers and peers).

A third attribute of effective classrooms that promote this kind of participatory learning is that children are engaged in the full range of instructional activities, either on their own, with other students, or with the teacher. When students do not share the same language as their

classmates, they are, of course, less likely to participate in instructional events characterized by the use of an unfamiliar language. Consequently, teachers may need to develop nonverbal modes of making sure that English language learners participate in the full range of instructional activities.

Many languages tend to be used in classrooms with significant numbers of English language learners. Consequently, the final attribute in this section is that teachers encourage students to use the language(s) aligned with the instructional goals of the lesson. Regardless of the instructional goal, however, teachers never devalue children's contributions in their native language.

Attributes and exemplars

1. Teachers are responsive to student contributions.

Exemplar: *Literature study is an open-ended approach to discussing books that has been used in a number of English-medium and bilingual classrooms with language minority students and with native English speakers. An important goal of this discussion event is to enable students to respond to literature on their own terms. Instead of asking children a set of comprehension questions designed to assess their understanding of what transpired in a particular book or chapter, teachers begin a literature study session by asking children, "What did you think of the book?" Initially, teachers may be silent, waiting for students to initiate the event by sharing what they particularly enjoyed or even disliked about a book. The teacher contributes to the discussion by sharing his or her responses to a book as well as by commenting on what others have said. After an initial session that may last 10 or 15 minutes, the teacher summarizes students' responses and formulates a literary assignment that entails having children focus in depth on some aspect of literature (e.g., theme, plot, characterization) that they brought up in their discussion. While this event works well with students from a range of language backgrounds, teachers working in English with new English learners have adapted the event by focusing on picture books or wordless books, allowing children to respond to literature through other media like pantomime or art, and by using visuals to stand for different kinds of responses.*

2. Teachers use a variety of discourse strategies, contingent upon students' verbal and written contributions, that encourage elaboration. For example, they recast and expand upon what students have said or written without negating what students have accomplished on their own. They encourage students to elaborate and provide bases or evidence for their statements or conclusions. They also give students time to think prior to responding.

Exemplar: *Mr. Dean, a teacher at Oakside School in the San Francisco Bay area, and his linguistically and culturally diverse class of third graders spend one hour each morning participating in writers' workshop. During this time, students write on topics of their own choosing, confer with teachers and other students about their writing, share their writings with the whole class, edit and compose multiple drafts of their writings, and publish final versions of what they have written. During informal writing conferences that involve Mr. Dean and his students, he encourages students to build upon and clarify what they have written. The following excerpt was recorded during a conference that focused on Raul's account of a soccer game, which he had written in English. Conferences that focus on Spanish writing are conducted in Spanish.*

Mr. Dean: *What's this mean? (Mr. Dean reads the following two sentences from Raul's story out loud.) "And if we won I could play soccer. But we didn't win and I was crying." So what*

are you saying here? When we were done with the game I was a little bit sad because we didn't win?

Raul: *Uh-huh.*

Mr. Dean: *Okay, what are you saying? If you did win . . .*

Raul: *It was the last game.*

Mr. Dean: *Oh, you mean you could have continued to play. So once you lost you were out of the tournament?*

Raul: *Yeah. It was the last game. And if we won we had to play one more turn.*

Mr. Dean: *Oh, and if you lost then you were out. You see, I think that could be clearer, don't you? So how could we do that? "When we were done playing soccer, I was a little sad because we didn't win." You could say, "If we won, we could have played another game."*

Raul: *Okay.*

Mr. Dean: *How would you say that?*

Raul: *If we won the game, I could have played another.*

3. Teachers encourage all students to participate in the full range of instructional activities.

Exemplar: *When working in English with new English language learners who do not share a common native language, many teachers have developed a variety of strategies that enable learners to participate in classroom activities nonverbally. Such strategies include using questions that do not require a verbal response (e.g., yes/no questions), encouraging the use of pantomime or drama, and using art as a means of expression. In addition, it is important that all of the students in a classroom know how to use these strategies so that students from different language backgrounds can communicate with one another when they cannot rely on English. Some teachers do this by developing a set of elaborate visual aides that describe routine events and actions that involve students. For example, laminated signs describe the activities and procedures associated with the different learning centers in Ms. Reed's third grade classroom. These signs are pictographs that summarize an activity without using words or letters. New English learners often point to these signs or show them to a colleague when they want to invite someone to participate in an activity with them.*

4. Teachers encourage students to respond in a language that is aligned with the goals of the lesson but do not devalue children's contributions in their native language.

Exemplar: *To enable student comprehension and participation in classroom activities, teachers at the Community School of Rochester seldom, if ever, insist that students use only English when interacting with one another. Students who share the same native language are often grouped together or paired so that they can rely on their first language when engaged in collaborative activities. Teachers in many of these classrooms also encourage their students to read and write in their native language so that they can express themselves fully about a given topic or issue. More experienced or able English language learners who read and write these languages are often asked to translate these writings and share the translations with their less English-fluent classmates.*

CONCLUSION

In this model for school change, we have attempted to specify the school-wide and classroom attributes or conditions that will enable English language learners to learn to high standards. By providing exemplars that are real-world applications of each attribute, we have offered a vision of what is occurring and therefore actually possible in the schools and classrooms that serve this student population. In other words, the attributes we

include are authentic not pie-in-the-sky ruminations about what could or should happen in schools and classrooms. Our exemplars demonstrate that the attributes have in some way been enacted. Moreover, we are confident that readers of this paper will generate additional exemplars based on their own experiences.

Once again, we want readers to understand that school communities should *not* use the attributes and exemplars contained in this model as a list of prescriptions. What we have presented here is a framework for improving the educational outcomes of English language learners. For change to occur, school communities must utilize this framework in ways that will lead to school improvement. As we see it, they will need to assess their practices against the criteria presented in this framework, set goals for improvement, and garner the necessary resources and will to create change. This latter endeavor is, indeed, the most difficult part of the enterprise.

Finally, we would like to point out that this is a working document. The attributes we have identified are based on theory, research, and experiential knowledge. We have discussed the shortcomings entailed in selecting attributes of effective practice from a research base that is clearly lacking in well designed studies that carefully assess classroom and school-wide processes in light of their academic outcomes. We hope, therefore, that our readers will consider these attributes as working hypotheses and take the opportunity to assess their effectiveness as they try them out in their local communities.

NOTES

1 We use the term *English language learners*, rather than *limited English proficient*, for those students who are acquiring English as their second language.

2 The Middle Grades Assessment Program, developed by the Center for Early Adolescence, the School Improvement System in California, and the inspectorate system in New York, has been used to help schools improve their performance. Other experts also advocate a bottom-up approach to school reform. For example, Mehan (1991) claims that to be successful, innovations must start from within the culture of the school, rather than be imposed from outside, and include social resources to mediate the relationship between new ideas and old practices.

3 Although standardized tests may not be the most appropriate measure of what students are learning in school, they do indicate whether students have learned something and therefore should not be dismissed out of hand. In fact, Goldenberg (personal correspondence, 1995) makes the point that Shavelson and others have found correlations between performance on standardized tests and assessments that are better aligned with school curricula. Goldenberg argues that studies that include test scores as criteria of effectiveness are (all else being equal) sounder than studies that base effectiveness on nomination by peers.

4 See *Prospects*, the Congressionally mandated study of educational growth and opportunity (U.S. Department of Education, 1993). This report indicates that whereas students classified as LEP comprise about 7% of the first-grade cohort, 6% of the third-grade cohort, and 3% of the seventh-grade cohort, about 13% of the first- and third-grade cohorts and 6% of the seventh-grade cohort are low-achieving LEP students.

5 Structured English immersion programs are those programs in which English is used almost exclusively. Drawing on the Canadian immersion pro-

gram models, the target language (in this case, English) is taught through the content areas (Lambert & Tucker, 1972).

6 Research done in Canada with English speakers learning French indicates that English-speaking language majority children in French immersion programs benefit from extended intensive exposure to French, with no detriment to learning content material in that language, as long as the home language continues to be developed and is supported. However, one cannot assume that the same is the case for U.S. language minority children because of issues of class and relative social status.

7 The names used for all schools cited in this report are pseudonyms.

8 Structured Alternative Instructional Programs are a category of program funded under the former *Bilingual Education Act*, Title VII of the *Elementary and Secondary Education Act*. SAIPs are alternatives to traditional bilingual education programs in that they intend to deliver instruction primarily in English, although a child's native language may be used for clarification. They were particularly intended for schools in which several minority languages are represented among the student population and where teachers proficient in those languages cannot be found.

9 This is a slightly edited example from National Education Commission on Time and Learning (1994, p. 35).

10 Violand-Sanchez, Sutton, and Ware (1991) have a good model for involving language minority families. They describe activities at the district and school levels that promote beneficial school home relationships.

11 These recommendations were developed by the Council of Chief State School Officers (1992) and are based on the recommendations of their advisory committee on the assessment of language minority students.

12 Many of these effective classroom practices are aptly described in a series of excellent reports produced by the National Clearinghouse for Bilingual Education. They include Buchanan & Helman (1993); Holt, Chips, & Wallace (1992); Cook & Urzua (1993); Fathman, Quinn, & Kessler (1992); and Samway (1992).

13 Much of this section is based on research by Tharp, Gallimore, Rueda, and Goldenburg. See Goldenberg (1991), Rueda et al. (1992), and Tharp and Gallimore (1988, 1991).

REFERENCES

August, D., Hakuta, K., & Pompa, D. (1994). *"For All Students": Limited English-proficient students and Goals 2000* (Occasional Papers in Bilingual Education. FOCUS No. 10). Washington, DC: National Clearinghouse for Bilingual Education.

Berman, P., Chambers, J., Gandara, P., McLaughlin, B., Minicucci, C., Nelson, B., Olsen, L., & Parrish, T. (1992). *Meeting the challenge of language diversity. An evaluation of programs for pupils with limited proficiency in English: Vol. 1. Executive summary.* Berkeley, CA: BW Associates.

Brookings Institution. (1994). *Making schools work: Improving performance and controlling costs.* Washington, DC: Author.

Buchanan, K., & Helman, M. (1993). *Reforming mathematics instruction for ESL literacy students* (Program Information Guide No. 15). Washington, DC: National Clearinghouse for Bilingual Education.

Carrel, P. L., & Eisterhold, J. C. (1987). Schema theory and ESL reading pedagogy. In M. Long & J. C. Richards, *Methodology in TESOL: A book of readings* (pp. 218-233). Boston: Heinle & Heinle.

Carroll, J. B. (1986). Second language. In R.F. Dillon & R. J. Sternberg (Eds.), *Cognition and instruction* (pp. 83-125). Orlando, FL: Academic.

Carter, T. P., & Chatfield, M. L. (1986). Effective bilingual schools: Implications for policy and practice. *American Journal of Education, 95*(1), 200-232.

Carter, T. P., & Maestos, L. C. (1982). *Bilingual education that works: Effective schools for Spanish speaking children.* Sacramento: California State Department of Education.

Cazden, C. (1984). *Effective instructional practices in bilingual education.* Cambridge, MA: Harvard University.

Chamot, A. U., & O'Malley, M. (1992). The Cognitive Academic Language Learning Approach: A bridge to the mainstream. In P. Richard-Amato & M. A. Snow (Eds.), *The multicultural classroom: Readings for content-area teachers* (pp. 227-249). White Plains, NY: Longman.

Chang, H. N. (1990). *Newcomer program: Innovative efforts to meet the challenges of immigrant students.* San Francisco: California Tomorrow.

Cochran, C. (1989). *Strategies for involving LEP students in the all-English-medium classroom: A cooperative learning approach* (Program Information Guide No. 12). Washington, DC: National Clearinghouse for Bilingual Education.

Collier, V. P. (1987). Age and rate of acquisition of second language for academic purposes. *TESOL Quarterly, 21*, 617-641.

Cook, B., & Urzua, C. (1993). *The literacy club: A cross-age tutoring/paired reading project* (Program Information Guide No. 13). Washington, DC: National Clearinghouse for Bilingual Education.

Council of Chief State School Officers. (1992). *Recommendations for improving the assessment and monitoring of students with limited English proficiency.* Washington, DC: Author.

Crandall, J. (1993). Current directions in curriculum development and materials. In G. R. Tucker (Ed.), *Policy and practice in the education of culturally and linguistically diverse students* (pp. 13-15). Alexandria, VA: Teachers of English to Speakers of Other Languages.

Cummins, J. (1981). The role of primary language development in promoting educational success for language minority students. In California State Department of Education, Office of Bilingual Bicultural Education (Ed.), *Schooling and language minority students: A theoretical framework* (pp. 3-50). Los Angeles: California State University.

Delgado-Gaitan, C. (1991). Involving parents in the schools: A process of empowerment. *American Journal of Education, 100*(1), 20-46.

Diaz, S., Moll, L. C., & Mehan, H. (1986). Sociocultural resources in instruction: A context-specific approach. In *Beyond language: Social and cultural factors in schooling language minority students* (pp. 187-230). Los Angeles: California State University; Evaluation, Dissemination and Assessment Center.

Dillon, R. F. (1986). Issues in cognitive psychology and instruction. In R. F. Dillon & R. J. Sternberg (Eds.),

Cognition and instruction (pp. 1-11). Orlando, FL: Academic.

Doyle, W. (1986). Teaching functions. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 392-431). New York: Macmillan.

Elmore, R., & Fuhrman, S. (1994). *Opportunity to learn and the state role in education.* New Brunswick, NJ: Consortium for Policy Research in Education.

Educational Testing Service. (1991). *The state of mathematics achievement: NAEP's 1990 assessment of the nation and the trial assessment of the states.* Washington, DC: National Center for Education Statistics.

Faltis, C., & Merino, B. (1992). Toward a definition of exemplary teachers in bilingual multicultural school settings. In R. Padilla & A. Benavides (Eds.), *Critical perspectives on bilingual education research.* Tempe, AZ: Bilingual Press/Editorial Bilingue.

Fathman, A. K., Quinn, M. E., & Kessler, C. (1992). *Teaching science to English learners, grades 4-8* (Program Information Guide No. 11). Washington, DC: National Clearinghouse for Bilingual Education.

Fleischman, H. L ., & Zehler, A. M. (1993). *Preliminary findings from the National Descriptive Study of Services for Limited-English Proficiency Students.* Arlington, VA: Development Associates.

Freeman, D. E., & Freeman, Y. S. (1991). "Doing" social studies: Whole language lessons to promote social action. *Social Education, 55,* 29-32, 66.

Garcia, E. (1991). *The education of linguistically and culturally diverse students: Effective instructional practices* (Educational Practice Rep. No. 1). Santa Cruz, CA and Washington, DC: National Center for Research on Cultural Diversity and Second Language Learning.

Genesee, F., & Hamayan, E. V. (1994). Classroom-based assessment. In F. Genesee (Ed.), *Educating second language children: The whole child, the whole curriculum, the whole community.* New York: Cambridge University Press.

Goldenberg, C. (1991). *Instructional conversations and their classroom application* (Educational Practice Rep. No. 2). Santa Cruz, CA and Washington, DC: National Center for Research on Cultural Diversity and Second Language Learning.

Goldenberg, C., & Sullivan, J. (1994). *Making change happen in a language minority school: A search for coherence* (Educational Practice Rep. No. 13). Santa Cruz, CA and Washington, DC: National Center for Research on Cultural Diversity and Second Language Learning.

González, N., Moll, L. C., Floyd-Tenery, M., Rivera, A., Rendón, P., Gonzales, R., & Amanti, C. (1993). *Teacher research on funds of knowledge: Learning from households* (Educational Practice Rep. No. 6). Santa Cruz, CA and Washington, DC: National Center for Research on Cultural Diversity and Second Language Learning.

Grant, C., & Sleeter, C. (1988). *Making choices for multicultural education: Five approaches to race, class, and gender.* New York: Merrill.

Hakuta, K. (1990). Language and cognition in bilingual children. In A. Padilla, H. Fairchild, & C. Valadez (Eds.), *Bilingual education: Issues and strategies* (pp. 47-59). Newbury Park, CA: Sage.

Hamayan, E. V. (1993). Assessing the academic and cognitive growth of culturally and linguistically diverse students. In G. R. Tucker (Ed.), *Policy and practice in the education of culturally and linguistically diverse students* (pp. 9-12). Alexandria, VA: Teachers of English to Speakers of Other Languages.

Hatch, C., Peck, S., & Wagner-Gough, J. (1979). A look at process in child second-language acquisition. In E. Ochs & B. B. Schieffelin (Eds.), *Developmental pragamatics* (pp. 269-280). New York: Academic.

Heath, S. B. (19830. *Ways with words: Language, life, and work in communities and classrooms.* Cambridge: Cambridge University Press.

Hedges, L. V., Laine, R. D., & Greenwald, R. (1994). Does money matter? A meta-analysis of studies of the effects of differential school inputs on student outcomes. (An exchange: Part 1). *Educational Researcher, 23*(3), 5-14.

Hernandez, J., & Donato, R. (1991). *Metacognition as an equity issue for Mexican American language minority students.* Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

Holt, D. D., Chips, B., & Wallace, D. (1992). *Cooperative learning in the secondary school: Maximizing language acquisition, academic achievement, and social development* (Program Information Guide No. 12). Washington, DC: National Clearinghouse for Bilingual Education.

Huston, A., McLoyd, C., & Garcia, C. (1994). Children and poverty: Issues in contemporary research. *Child Development, 65*(2), 275-282.

Independent Commission on Chapter 1. (1992). *Making schools work for children in poverty: A new framework prepared by the Commission on Chapter 1.* Washington, DC: American Association for Higher Education.

Kagan, S. (1986). Cooperative learning and sociocultural factors in schooling. In *Beyond language: Social and cultural factors in schooling language minority students* (pp. 231-298). Los Angeles: California State University; Evaluation, Dissemination and Assessment Center.

Krashen, S., & Biber, D. (1988). *On course: Bilingual education's success in California.* Sacramento: California Association for Bilingual Education.

Lambert, W. E., & Tucker, G. R. (1972). *Bilingual education of children: The St. Lambert experiment.* Rowley, MA: Newbury House.

Lucas, T. (1993). Secondary schooling for students becoming bilingual. In M. B. Arias & U. Casanova (Eds.), *Bilingual education: Politics, research and practice.* Chicago: National Society for the Study of Education.

Lucas, T., Henze, R., & Donato, R. (1990). Promoting the success of Latino language minority students: An exploratory study of six high schools. *Harvard Educational Review, 60*(3), 315-340.

Malave, L. M. (1988). Effective schools research and language instruction programs. In L. M. Malave (Ed.), *NABE 87: Theory, research and application.* Fall River, MA: National Dissemination Center.

McLaughlin, B. (1992). *Myths and misconceptions about second language learning: What every teacher needs to unlearn* (Educational Practice Rep. No. 5). Santa Cruz, CA and Washington, DC: National Center for Research on Cultural Diversity and Second Language Learning.

Mehan, H. (1991). *Sociological foundations supporting the study of cultural diversity* (Research Rep. No. 1). Santa Cruz, CA and Washington, DC: National Center for Research on Cultural Diversity and Second Language Learning.

Milk, R., Mercado, C., & Sapiens, A. (1992). *Re-thinking the education of teachers of language minority children: Developing reflective teachers for changing schools* (Occasional Papers in Bilingual Education. FOCUS No. 6). Washington, DC: National Clearinghouse for Bilingual Education.

Minicucci, C., & Olsen, L. (1992). *Programs for secondary limited English proficient students: A California study* (Occasional Papers in Bilingual Education. FOCUS No. 5). Washington, DC: National Clearinghouse for Bilingual Education.

Moll, L. C. (1992). Bilingual classroom studies and community analysis: Some recent trends. *Educational Researcher, 21*(2), 20-24.

Moss, M., & Puma, M. (1995). *Prospects: The congressionally mandated study of educational growth and opportunity.* Cambridge, MA: ABT Associates.

National Board for Professional Teaching Standards. (n.d.). *What teachers should know and be able to do.* Detroit, MI: Author.

National Education Commission on Time and Learning. (1994). *Prisoners of time.* Washington, DC: U.S. Government Printing Office.

Navarette, C., Wilde, J., Nelson, C., Martinez, R., & Hargett, G. (1990). *Informal assessment in educational evaluation: Implications for bilingual education programs* (Program Information Guide No. 13). Washington, DC: National Clearinghouse for Bilingual Education.

Nieto, S. (1992). *Affirming diversity: The sociopolitical context of multicultural education.* White Plains, NY: Longman.

Ogbu, J. U. (1992). Understanding cultural diversity and learning. *Educational Researcher, 21* (8), 5-14.

Ogbu, J. U., & Matute-Bianchi, M. E. (1986). Understanding sociocultural factors: Knowledge, identity, and school adjustment. In *Beyond language: Social and cultural factors in schooling language minority stu-*

dents (pp. 73-142). Los Angeles: California State University; Evaluation, Dissemination and Assessment Center.

Ohio State Department of Education. (1986). *Effective schooling for language minority students: Research and practice related to the establishment and maintenance of effective bilingual education programs.* Columbus, OH: Author.

Olsen, L., Chang, H., Salazar, D. D., Leong, C., Perez, Z., McClain, G., & Raffel, L. (1994). *The unfinished journey: Restructuring schools in a diverse society.* San Rafael, CA: California Tomorrow.

Pelavin Associates, Inc. (1991). *A revised analysis of the supply of bilingual and ESL teachers: An analysis of schools and staffing survey data.* Washington, DC: Author.

Perez, B., & Torres-Guzmán, M. (1992). *Learning in two worlds: An integrated Spanish/English biliteracy approach.* New York: Longman.

Pierce, L. V. (1991). *Effective schools for language minority students.* Washington, DC: Mid-Atlantic Equity Center.

Pierce, L. V., & O'Malley, J. M. (1992). *Performance and portfolio assessment for language minority students* (Program Information Guide No. 9). Washington, DC: National Clearinghouse for Bilingual Education.

Ramirez, D. J., Yuen, S. D., Ramey, D. R., & Pasta, D. J. (1991). *Final report: National longitudinal study of structured-English immersion strategy, early-exit and late-exit transitional bilingual education programs for language-minority children* (Vols. 1-2). San Mateo, CA: Aguirre International.

Richard-Amato, P., & Snow, M. A. (1992). *The multicultural classroom: Readings for content-area teachers.* White Plains, NY: Longman.

Rivera, C., & Zehler, A. M. (1990). *Collaboration in teaching and learning: Findings from the Innovative Approaches Research Project.* Arlington, VA: Development Associates.

Rogoff, B. (1990). *Apprenticeship in thinking: Cognitive development in social context.* New York: Oxford University Press.

Rosenshine, B., & Stevens, R. (1986). Teaching functions. In M. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed.) (pp. 376-391). New York: Macmillan.

Rueda, R., Goldenberg, C., & Gallimore, R. (1992). *Rating instructional conversations: A guide* (Educational Practice Rep. No. 4). Santa Cruz, CA and Washington, DC: National Center for Research on Cultural Diversity and Second Language Learning.

Samway, K. D. (1992). *Writers' workshop and children acquiring English as a non-native Language* (Program Information Guide No. 10). Washington, DC: National Clearinghouse for Bilingual Education.

Saville-Troike, M. (1991). *Teaching and testing for academic achievement: The role of language development* (Occasional Papers in Bilingual Education. FOCUS No. 4). Washington, DC: National Clearinghouse for Bilingual Education.

Short, D. (1991a). *How to integrate language and content instruction: A training manual.* Washington, DC: Center for Applied Linguistics.

Short, D. (1991b). *Integrating language and content instruction: Strategies and techniques* (Program Information Guide No. 7). Washington, DC: National Clearinghouse for Bilingual Education.

Slavin, R.E., & Yampolosky, R. (1992). *Success for All: Effects on students with limited English proficiency: A three-year evaluation* (Rep. No. 29). Baltimore, MD: Center for Research on Effective Schooling for Disadvantaged Students.

Smith, M.S., & O'Day, J. (1990). Systemic school reform. In S. Fuhrman & B. Malen (Eds.), *The politics of curriculum and teaching* (Yearbook of the Politics of Education Association). Bristol, PA: Falmer.

Snow, C. (1992). Perspectives on second-language development: Implications for bilingual education. *Educational Researcher, 21*(2), 16-19.

Stanford Working Group. (1993). *Federal programs for limited English proficient students: A blueprint for a second generation.* Stanford, CA: Stanford University.

Stedman, L. C. (1987). It's time we changed the effective schools formula. *Phi Delta Kappan, 69*(3), 215-224.

Swain, M. (1993). Cognitive academic language needs of culturally and linguistically diverse students. In G. R. Tucker (Ed.), *Policy and practice in the education of culturally and linguistically diverse students* (pp. 7-9). Alexandria, VA: Teachers of English to Speakers of Other Languages.

Taylor, W., & Piche, D. M. (1991). *A report on short-changing children: The impact of fiscal inequity on the education of students at risk* (Serial No. 101-U). Washington, DC: U.S. Government Printing Office.

Tharp, R., & Gallimore, R. (1988). *Rousing minds to life: Teaching, learning, and schooling in social context.* New York: Cambridge University Press.

Tharp, R., & Gallimore, R. (1991). *The instructional conversation: Teaching and learning in social activity* (Research Rep. No. 2). Santa Cruz, CA and Washington,DC: National Center for Research on Cultural Diversity and Second Language Learning.

Tikunoff, W. J., Ward, B. A., Broekhuizen, L. D. van, Romero, M., Castaneda, L. V., Lucas, T., & Katz, A. (1991). *A descriptive study of significant features of exemplary special alternative instructional programs. Executive summary.* Larkspur, CA: The Southwest Regional Educational Laboratory.

U.S. Department of Education. (1993). *Prospects.* Washington, DC: Author.

Vasquez, O. A., Pease-Alvarez, L., & Shannon, S. (1994). *Pushing boundaries: Language and culture in a Mexicano community.* New York: Cambridge University Press.

Violand-Sanchez, E., Sutton, C. P., & Ware, H. W. (1991). *Fostering home-school cooperation: Involving language minority families as partners in education* (Program Information Guide No. 6). Washington, DC: National Clearinghouse for Bilingual Education.

Wang, M.C., Haertel, G. D., & Walberg, H. J. (1993). Toward a knowledge base for school learning. *Review of Educational Research, 63*(3), 249-294.

OTHER REPORTS FROM NCRCDSLL

RESEARCH REPORTS

RR 1 *Sociological Foundations Supporting the Study of Cultural Diversity* (1991), Hugh Mehan

RR 2 *The Instructional Conversation: Teaching and Learning in Social Activity* (1991), Roland G. Tharp & Ronald Gallimore

RR 3 *Appropriating Scientific Discourse: Findings from Language Minority Classrooms* (1992), Ann S. Rosebery, Beth Warren & Faith R. Conant

RR 4 *Untracking and College Enrollment* (1992), Hugh Mehan, Amanda Datnow, Elizabeth Bratton, Claudia Tellez, Diane Friedlaender & Thuy Ngo

RR 5 *Mathematics and Middle School Students of Mexican Descent: The Effects of Thematically Integrated Instruction* (1992), Ronald W. Henderson & Edward M. Landesman

RR 6 *Moving In and Out of Bilingualism: Investigating Native Language Maintenance and Shift in Mexican-Descent Children* (1993), Lucinda Pease-Alvarez

RR 7 *Two-Way Bilingual Education: A Progress Report on the Amigos Program* (1993), Mary Cazabon, Wallace E. Lambert & Geoff Hall

RR 8 *Literacy Practices in Two Korean-American Communities* (1993), Robin Scarcella & Kusup Chin

RR 9 *Teachers' Beliefs about Reading Assessment with Latino Language Minority Students* (1994), Robert Rueda & Erminda Garcia

RR 10 *Tracking Untracking: The Consequences of Placing Low Track Students in High Track Classes* (1994), Hugh Mehan, Lea Hubbard, Angela Lintz & Irene Villanueva

RR 11 *Students' Views of the Amigos Program* (1994), Wallace E. Lambert & Mary Cazabon

RR 12 *Enacting Instructional Conversation with Spanish-Speaking Students in Middle School Mathematics* (1995), Stephanie Dalton & June Sison

RR 13 *Verbal Comprehension and Reasoning Skills of Latino High School Students* (1995), Richard Durán, Russell Revlin & Dale Havill

RR 14 *"This Question Is Just Too, Too Easy!" Perspectives From the Classroom on Accountability in Science* (1995), Beth Warren & Ann S. Rosebery

RR 15 *Conceptualizing Academic Language* (1995), Jeff Solomon & Nancy Rhodes

EDUCATIONAL PRACTICE REPORTS

EPR 1 *The Education of Linguistically and Culturally Diverse Students: Effective Instructional Practices* (1991), Eugene E. García

EPR 2 *Instructional Conversations and Their Classroom Application* (1991), Claude Goldenberg

EPR 3 *Language Minority Education in the United States: Implications of the Ramirez Report* (1992), Courtney B. Cazden

EPR 4 *Rating Instructional Conversations: A Guide* (1992), Robert Rueda, Claude Goldenberg, & Ronald Gallimore

EPR 5 *Myths and Misconceptions about Second Language Learning: What Every Teacher Needs to Unlearn* (1992), Barry McLaughlin

EPR 6 *Teacher Research on Funds of Knowledge: Learning from Households* (1993), Norma González, Luis C. Moll, Martha Floyd-Tenery, Anna Rivera, Patricia Rendón, Raquel Gonzales & Cathy Amanti

EPR 7 *Instructional Conversations in Special Education Settings: Issues and Accommodations* (1993), Jana Echevarria & Renee McDonough

EPR 8 *Integrating Language and Culture in Middle School American History Classes* (1993), Deborah J. Short

EPR 9 *Links Between Home and School Among Low-Income Mexican-American and European-American Families* (1994), Margarita Azmitia, Catherine R. Cooper, Eugene E. García, Angela Ittel, Bonnie Johanson, Edward M. Lopez, Rebeca Martínez-Chávez & Lourdes Rivera

EPR 10 *Effective Instructional Conversation in Native American Classrooms* (1994), Roland G. Tharp & Lois A. Yamauchi

EPR 11 *Integrating Language and Content: Lessons from Immersion* (1994), Fred Genesee

EPR 12 *Two-Way Bilingual Education: Students Learning Through Two Languages* (1994), Donna Christian

EPR 13 *Making Change Happen in a Language Minority School: A Search for Coherence* (1994), Claude Goldenberg & Jessie Sullivan

EPR 14 *Fostering Second Language Development in Young Children: Principles and Practices* (1995), Barry McLaughlin

EPR 15 *Creating a Community of Scholarship with Instructional Conversations in a Transitional Bilingual Classroom* (1995), G. Genevieve Patthey-Chavez, Lindsay Clare & Ronald Gallimore

EPR 16 *Learning English: How School Reform Fosters Language Acquisition and Development for Limited English Proficient Elementary School Students* (1996), Beryl Nelson

EPR 17 *Learning Science and English: How School Reform Advances Scientific Learning for Limited English Proficient Middle School Students* (1996), C. Minicucci

Video Series

MEETING THE CHALLENGE OF TEACHING LINGUISTICALLY DIVERSE STUDENTS

VS 1 *Profile of Effective Bilingual Teaching: Kindergarten* (1995), Jon Silver

VS 2 *Profile of Effective Bilingual Teaching: First Grade* (1995), Jon Silver

VS 3 *Instructional Conversations: Understanding Through Discussion* (1995), Jana Echevarria & Jon Silver

VS 4 *Profile of Effective Teaching in a Multilingual Classroom (1996), Jon Silver*

Ordering Information

TO ORDER COPIES OF RESEARCH REPORTS, EDUCATIONAL PRACTICE REPORTS, AND VIDEOS
Dissemination Coordinator • National Center for Research on Cultural Diversity and Second Language Learning
Center for Applied Linguistics • 1118 22nd Street N.W. • Washington, D.C. 20037 • 202-429-9292

THE NATIONAL CENTER FOR
RESEARCH ON
CULTURAL DIVERSITY AND
SECOND LANGUAGE LEARNING
SOCIAL SCIENCES II
1156 HIGH STREET
UNIVERSITY OF CALIFORNIA
SANTA CRUZ, CA 95064
PHONE: (408) 459-3500
FAX: (408) 459-3502

recycled paper